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The Seminar, a joint venture of the Agency for International Development and the Labor Department of the United States, brought together 29 participants from 20 developing countries for the purpose of exchanging ideas and experiences on manpower programs and planning efforts. These proceedings are the result of notes taken by reporters during the sessions and are a synthesis of the main points made. Various sessions summarized in the first part of the proceedings deal with current issues which include such problems as excessive population growth, the crisis in food production, and the slow progress by economic development programs. Substantial attention is also given to guidelines for planning, which establish the framework within which manpower planning is expected to be most successful, and strategies for human resources planning. The second portion of the Seminar provided participants with an orientation on United States manpower programs. During the third part of the Seminar, participants acted as manpower advisors to a fictitious country. They diagnosed the problems, established strategies for alleviating them, examined the administrative structure for planning, and evolved a final manpower plan. Tables and charts are included. (ET)

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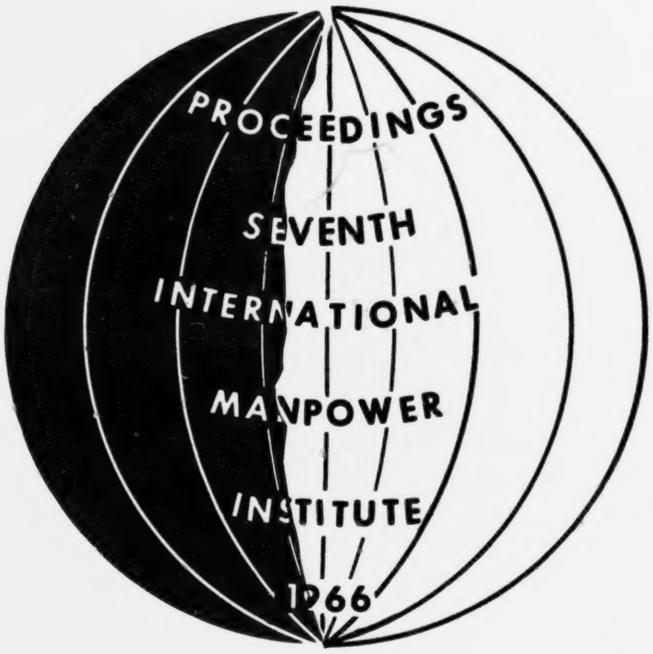
MANPOWER AND EMPLOYMENT POLICIES FOR DEVELOPING COUNTRIES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MANPOWER AND EMPLOYMENT POLICIES FOR DEVELOPING COUNTRIES

Proceedings of the
~~Seventh~~ International Manpower Seminar (7th,
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FOREWORD

Since 1961, the International Manpower Seminars have provided a means for persons from different parts of the world to exchange ideas and experiences with respect to manpower programs and planning efforts. The Seminars bring together academicians and high-level policy-making officials from governments and private institutions in developing countries and the United States. With manpower programs as the focus of the meetings, the lectures and discussions range over a variety of disciplines including economics, sociology, anthropology, demography, and the problem of food production. Originally held annually, Seminars now take place in the summer and winter of each year.

Alternating Seminars are composed of French and English speaking foreign participants, and Spanish and English speaking persons. Each Seminar is conducted on a bilingual basis with simultaneous translation. Sessions are held at the International Manpower Institute, a joint venture of the Agency for International Development and the United States Department of Labor. Seminars usually run for a period of 10 weeks, including a field trip to visit manpower institutions throughout the United States.

The Seventh International Manpower Seminar began September 28, 1966, and ended December 10. Twenty-nine participants from 20 developing countries attended, representing Brazil, Chile, the Republic of China, Colombia, El Salvador, Guatemala, Indonesia, the Republic of Korea, Liberia, Malawi, Nicaragua, Nigeria, Pakistan, Panama, Paraguay, Peru, Sierra Leone, Tanzania, Thailand, and Turkey.

The volume of the material discussed makes it impossible to present the contributions made by the speakers in their entirety. These Proceedings are the result of notes taken by rapporteurs during the sessions and are a synthesis of the main points made. It is hoped that they will be of value to scholars and policy makers concerned with manpower problems.

The various contributions reflect the diversity of backgrounds and points of view represented at the Seminar. This indicates the complete academic freedom which prevailed but it also points to the complexity of the problems discussed. The fact that so many different parts of the world were represented made for particularly lively discussions from which Seminar leaders often learned as much as the members of the group.

The Seventh Seminar was divided into three major segments: 1) a series of lectures and discussions on concepts and strategies for manpower planning, 2) a study of U.S. manpower institutions in operation, and 3) a case study in manpower planning for a fictitious country. Dominant throughout was the theme that human resources planning has become widely accepted as an integral part of general economic planning and, therefore, has assumed a larger role and broader functions in the development process than had been ascribed to it in the past.

Various sessions summarized in the first part of the Proceedings deal with current issues which include such problems as excessive population growth, the crisis in food production, and the slow progress made by economic development programs. Substantial attention is also given to guidelines for planning, which establish the framework within which manpower planning is expected to be most successful, and strategies for human resources planning, such as methods for projecting manpower supplies and requirements, education and training, and insuring the optimum manpower distribution and utilization. The importance of having a suitable administrative structure for the implementation of plans is also emphasized.

The second portion of the Seminar, planned and directed by Raphael Brown, provided participants with an orientation on United States manpower programs. After a series of background lectures, Seminar members were divided into two groups to facilitate travel across the country. One group visited Atlanta and San Antonio, and the other Houston and Kansas City. They met in Knoxville, Tennessee to observe activities of the TVA.

Four major points were particularly stressed throughout the field trip. One was the close collaboration between federal, state, county, and local governments as well as various private institutions in supplying current and future manpower demands through the training and upgrading of skills. Secondly, the role of the agricultural sector was emphasized. Considerable attention was given to the new techniques, new equipment, and new outlook which are required of the modern farmer in order to feed the rapidly growing urban community. The service sector was also given attention during the trip. Participants were made aware of the close relationship that exists between the demands of local and regional labor markets and the types of training they were able to observe in both formal educational systems and specialized local vocational centers. Finally, programs for the disadvantaged were examined, and participants were shown projects to train or rehabilitate older workers, handicapped people, school dropouts, etc.

During the third portion of the Seminar, participants were expected to act as manpower advisors to a fictitious country which illustrated many of the manpower and other problems common to developing nations. They were asked to 1) diagnose the problems, 2) establish a strategy for alleviating them, 3) examine the administrative structure for planning, and 4) evolve a final manpower plan.

On November 23, the Secretary of Labor, W. Willard Wirtz, held a reception for the participants of the Seventh International Manpower Seminar and members of their embassies. The Secretary publicly expressed his interest in the manpower activities carried on in developing countries and had numerous private conversations on the subject with his guests.

Of the many people who contributed to make the Seventh International Seminar a success, Mr. Ealton L. Nelson of AID should receive particular mention. Mr. Nelson was available at all times for consultation by the participants, attended many of the sessions, and was ready to assist with the program or administrative problems whenever needed. The farewell party given by Mr. and Mrs. Nelson for the participants was one of the highlights of the Seminar.

During the last week of the Seminar, the Agency for International Development, as well as the Labor Department, conducted special closing ceremonies. On December 2, AID sponsored a luncheon at the State Department, presided over by the Assistant Administrator for AID, William O. Hall, who addressed the group and presented them with certificates. Mr. Joshua Theobald Nottidge of Sierra Leone responded for the participants. Mr. Nottidge stressed that the Seminar had not only increased the participants' ability and potential for dealing with social and economic problems in their countries, but it had proved to them that people of different countries can live and work together without friction.

Mr. Leo R. Werts, Assistant Secretary for Administration of the Department of Labor, made the principal address and presented the certificates at the Labor Department's closing ceremonies on December 9. Mr. Hector Torres from Guatemala thanked the Department on behalf of the participants. In his remarks, Mr. Torres indicated that the most valuable lesson he had learned during his stay in the United States was that the term "underdeveloped" should not be applied to a country but rather to its inhabitants. By emphasizing this, development economics loses much of its impersonal character and becomes a science eminently human which has as its end the welfare of the human being.

PART ONE

HUMAN RESOURCES IN ECONOMIC AND SOCIAL DEVELOPMENT: CONCEPTS, STRATEGIES AND ADMINISTRATION

Part One

HUMAN RESOURCES IN ECONOMIC AND SOCIAL DEVELOPMENT: CONCEPTS, STRATEGIES AND ADMINISTRATION

Human resources planning has become widely accepted as an integral part of general economic planning and, as a result, has assumed a larger role and broader functions in the development process than had been ascribed to it in the past. Thus, Seminar participants were continually cautioned against viewing manpower planning as a specific science which can be separated from educational planning, health programs, population and migration trends, agricultural programs, etc. This line of reasoning was supported by the great variety of interrelated problems that were brought out in the lectures of speakers and in the questions and discussions of the participants (Section "A"). Unemployment, underemployment, overpopulation, high rates of illiteracy, lack of skills in the labor force, and desperately low per capita incomes were reiterated by persons with different backgrounds and experiences in widely separated parts of the world. The many solutions suggested to the problems posed (Section "B"), frequently represented different points of view, but there was general agreement that manpower strategies should ideally be based on the broadest possible knowledge of the country in question, and its people. In Section "C" stress is placed on the proper institutions to carry out the strategies proposed under "B" and, here again, it is made clear that manpower planning activities and various other planning activities merge at certain points.

Throughout "Part One" of the Proceedings it is emphasized that investment in human resources is at least as productive as investment in capital goods. Mr. Harbison carries this thought a step further by stating that "the wealth of a nation does not depend on its physical capital, but rather on the capabilities of its people to make the most of what is available."

A. MANPOWER PLANNING--RATIONALE & OBJECTIVES

INTRODUCTION

In the initial portion of this report, the speakers are particularly concerned with some of the existing situations facing manpower planners as they strive for the objectives of improving the supply and utilization of human resources. Mr. McVoy stresses some of the persistent and, at times, growing problems which face developing nations and emphasizes that manpower planners should be concerned with the many facets of change that occur in the process of economic development. He warns against too many neat classifications and assumptions with respect to human behavior, showing, in a historic treatment, how the dogmas of manpower planners have often been negated by events. He expresses the hope that the planning strategies employed will remain sensitive to the many social, economic, and cultural aspects of the particular society involved, and to the changes that occur in these during the course of a nation's economic development. Mr. Givens also cautions against looking for easy solutions. Many serious problems continue to exist in spite of the best efforts to solve them. He points out that developed countries cannot simply be accepted as guides by the newly developing nations since the responses of the former probably took place under different circumstances than those prevailing in developing countries today.

The far-reaching effects of rapid population increases in developing countries are the subject of Mr. Lee's two lectures. In his first talk he points to the difference in population growth between the developed countries (about one percent) and the developing countries (three percent to three and one-half percent) and discusses the dangers of a population increase which is proportionately greater than the increase in GNP. He concludes that many countries need to decrease their rates of population growth and outlines some policies which nations might follow to achieve such a goal. In his second talk, Mr. Lee describes the dramatic impact the current rate of population growth will have on future labor forces of societies now in the transitional stage of population growth--i.e. those characterized by high birth rates and declining death rates among children. The problem of finding jobs for a greatly expanded labor force will be accentuated by rural-urban migrations, which Mr. Lee considers an inevitable result of the attractions of the city for the poor, uneducated, and underemployed from the hinterlands. Attempts to stem this migration would be futile, he believes, and actually little would be gained if the migrants could be persuaded to remain on the land. Mr. Cavanaugh also emphasizes the manpower problems inherent in overpopulation. He mentions the erroneous conception many administrators have of what constitutes an overpopulation problem. Dividing the number of people into the available square miles or kilometers of a country cannot yield the answer, but the conclusion that a population problem does not exist is frequently arrived at in this manner. Mr. Cavanaugh discusses the causes of overpopulation, the consequences, the constraints against controls, and U.S. population policies.

Closely tied to the problem of overpopulation is that of the crisis in world food production, a topic discussed by Mr. Weaver. It was pointed out that in the developing countries of Africa, Latin America and the Middle East, food exports exceeded imports by $11 billion in 1930 while in 1960 imports of food were in excess of exports by $30 billion. The combined productivity of existing acreage will not meet the food needs of developing countries by 1985 unless vast improvements are made in agricultural modernization. Here the proper use of human resources will play a vital role.

The interrelationship of the various components of national development crystallizes as the Proceedings progress, but it is emphasized from the outset by Mr. Fortin, who describes some of the history and background of manpower planning in the International Labor Office. In the process he points to the change in thinking that has occurred over the years with respect to the aims of such planning and the best methods for achieving them. He concludes that manpower planning must be considered in the broadest possible context. Mr. Kelley shares this view. He emphasizes that close coordination is required between economic development and manpower planning. In fact he thinks that, as far as possible, decisions about politics, capital, and manpower should be made simultaneously in order to avoid wasting valuable, scarce resources. Mr. Kelley also feels that manpower planners should be flexible with respect to the time requisites of the plan. Short-term plans can, at times, be more realistic and effective than detailed long-term plans. Mr. Hilliard calls manpower planning an integral part of all facets of the national development effort. Planners first agree on objectives which in themselves influence the manpower strategy to be used. They must then look at the country's resources. Finally, the plan must be broken down by economic sectors so that resources, both natural and human, may be properly allocated to attain the goals. Mr. Hilliard favors long-range planning, however, feeling that for efforts that are really going to make a major impact, such as the development of teachers and administrators, we must learn to look 20 and 30 years ahead. Mr. Horowitz stresses the importance of having manpower planning and economic planning proceed at an equal pace and lists six basic considerations which must be given attention to insure that this is the case. Mr. Halty Carrére makes an analogy in his lecture between the management of capital resources and of human resources.

1. Current Issues

SOME BASIC PROBLEMS AND APPROACHES IN MANPOWER PLANNING

Edgar C. McVoy

A REVIEW OF ECONOMIC GROWTH TRENDS IN DEVELOPING COUNTRIES

The record of economic growth and improvement in living standards in the less-developed countries of the world during the past 20 years has been discouraging. Recent evaluation by a number of leading economists, scholars, and other international specialists has resulted in the realization that the masses of people in many countries are no better off, and in some cases are worse off, than they were two decades ago.

Lack of Economic Progress

The evidence of this lack of progress is hard to discount, even by the most optimistic. While improved health and sanitation have been reducing death rates and increasing the average life-span, birth rates have continued high. Thus, rates of population increase have been rising and are in the range of two and one-half to three percent annually in many countries. Growth rates of GNP in many developing countries have barely equalled the rates of population growth, and even in the countries where per capita income has risen at satisfactory rates, the benefits have not been spread widely among the people.

Meanwhile, in a number of less-developed countries, production of food is not keeping pace with population growth, and some countries, which were formerly exporting rice or other basic foodstuffs, are now importing these very same foods. In addition, rural areas have been exporting part of their misery to the cities and we have in most countries, including some developed ones, the familiar picture of masses crowded in slums, in makeshift houses, suffering from a lack of jobs, education, health services, water and sanitation.

Moreover, the gap between the so-called advanced and underdeveloped countries has, with a few exceptions, been increasing. In many of the industrialized countries, the gross national product increases five percent or more per year, while their population growth rates are less than two percent; meanwhile, only a few of the less-developed countries have a consistent annual growth of five percent, but population grows at two and one-half to three percent.

Another unpleasant realization to economic planners is that industrialization, and even rapid economic growth, do not necessarily solve the enormous problems of unemployment and underemployment in less-developed countries (or in some advanced countries, for that matter). The International Labor Office submitted a paper to the 1965 Asian Conference on Industrialization in Manila, which presented a dismal account of the failure of industrial development to create employment in Asian countries over the past two decades.[1]

Reasons for Slow Progress and Suggestions to Stimulate Growth

During the past two or three years, a number of leading scholars, administrators and other observers of the international development scene, have been searching for the reasons for this disappointing performance. Some say it is lack of capital and unfavorable terms of trade. Raoul Prebisch is a leading exponent of this view. Others say the big problem is food production.

Gunnar Myrdal, in an article "Food, Jobs, and People,"[2] says..."the most important thing in planning for development is to increase the yields of the land where regularly over half, and in Asia often three-fourths or more, of the people in underdeveloped countries eke out their existence." Professor Frederick Harbison, whom you will hear later in the Seminar, emphasizes this point also and adds that the major means of reducing urban misery and unemployment is to increase incentives for people to stay on the land.

Bosco Nedelcovic, of Paraguay, in an article entitled "Fallacies of Conventional Approaches to Development,"[3] challenges what he terms the "overwhelming consensus of orthodox economic wisdom...that the nondeveloped areas must duplicate the same worn-out patterns which are beginning to collapse in the advanced countries..."; namely, in trying to create employment by various patterns of investment and incentives. Nedelcovic is of the opinion that the only solution lies in the rapid mechanization and modernization of agriculture, and in using part of the surplus to provide subsistence to the unemployed residing mostly in rural areas.

Walt Rostow gives great emphasis to agriculture but also to other factors in a ten-point analysis of "Unsolved Problems in International Development."[4] Another type of analysis of the disappointing progress of development was made by the International Bank for Reconstruction and Development and is summarized by Albert Waterston in an article, "What Do We Know about Planning."[5] Waterston emphasizes the following reasons for the general failure of development planning to produce the results so eagerly anticipated a few years ago: 1) most countries cannot plan effectively for more than three years in the future, though plans are often drawn up for five to 10 years; 2) few countries benefit from the experiences of other countries with similar problems; 3) not many countries understand the essence of development planning, which "involves the application of a rational system of choices among feasible courses of investment and other development actions, based on a consideration of economic and social costs and benefits"; 4) lack of adequate government support or sustained governmental commitment; 5) separation of plan formulation from implementation; 6) overambitious plan targets; 7) too little attention to specific projects. He lists the following as the three basic elements of the planning process: economic potential, administrative capacity, and political will to develop.

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[1] "Industrialization and Employment", paper prepared by the ILO for Asian Conference on Industrialization, Manila, December 1965.

[2] International Development Review, June 1965.

[3] International Development Review, December 1965.

[4] International Development Review, December 1965 and March 1966.

[5] International Development Review, December 1965. The article is a summary of a book, Development Planning: Lessons of Experience, Johns Hopkins Press, 1965.

John Kenneth Galbraith, in a speech last spring at the meeting of the Society for International Development, suggested that in applying formulae for economic growth, we have failed to differentiate major barriers to economic growth, even among nations which are near the so-called take-off stage. He suggested three models. The first represents countries suffering from what he calls the classic causes of underdevelopment: overpopulation and insufficient capital (though reasonably high development of human resources). A second group of countries are those in which a low level of human resource development is the primary cause; and the third category consists of countries where rigidities in the social structure are the major handicap to development.

Finally, the Secretary General of the United Nations, in a discouraging summary of world trends in the past year, concluded that the rich nations have not risen "above their concern for their own prosperity, nor the poor nations above the deadweight of their chronic poverty and their anachronistic social structures."[6]

The Positive Record of Economic Progress

I feel rather sad, at this opening of our Seminar, to outline such an apparently dismal and negative view of the state of the world and of progress of development in the have-not countries of the world. Actually, I am not as pessimistic about this situation as I may sound in the foregoing analysis. This is because 1) progress in some less-developed countries has been impressive despite seemingly insurmountable problems a few years ago; 2) I believe the developed countries are continually increasing their interest in, and commitment to, world-wide development, in a spirit not of charity but of enlightened self-interest; 3) there is a growing technology which can be applied in potentially dramatic solutions to some of the barriers to development; 4) we are beginning to generate at least an art, if not a science, of development based on lessons of experience and a growing body of research and analysis into the factors stimulating and inhibiting economic and social growth.

In a sense, it is a constructive thing that most of the experts now concede that the facile formulae and models of the recent past have failed to solve the toughest problems of development. To me, it is highly encouraging that leading thinkers and observers are challenging the orthodoxy of scholarly consensus and are searching for new approaches and principles.

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[6] The Washington Post, September 19, 1966.

PATTERNS IN HUMAN RESOURCES PLANNING

My historic treatment of the recognition of human resources development and manpower planning as an important field of study is highly personal, and I make no claim that it is a balanced picture. I think it may be the best way, however, to put into focus some of the trends and problems in this field.

In the early 1950's, development planning became fashionable, and many of us had high hopes for the rapid growth of most underdeveloped areas of the world. It was a widely held belief that sufficient injections of capital and the quick transfer of know-how from advanced countries to underdeveloped countries would solve the basic problems of development. Along with this, there was recognition of the need for technical education and skill training to supply what was considered an open-ended need for trained manpower in many fields. This was the day of the so-called "manpower survey," which many countries undertook under the tutelage of experts from ILO, or "point four" technicians. I was such an ILO technician in Indonesia during this period.

Such surveys, which were one-time canvasses of employing establishments, attempted to show the occupational structure of industry and identify occupations in which there were current or anticipated shortages. These surveys had some value in short-range guidance for courses in technical schools and skill-training centers. It was assumed that the proliferation of such schools and centers was the only answer to the manpower shortage. During this same period it was assumed that an adequate rate of growth would solve the unemployment gap within a few years, and that surplus labor could be kept as an underemployed pool in the rural areas until the demands of industry and related services would draw them to the cities.

There were few, if any, countries in which these assumptions proved valid, although it must be noted that not many actually implemented more than a minor portion of plans and investment schemes devised under such guidelines. Some countries, however, geared up their technical and vocational schools and began grinding out graduates who were supposed to supply the skilled craftsmen and technicians to carve out development programs. A rather large portion of such education turned out to be wasted, at least in any short-run analysis of cost-benefit relationships, because the jobs to employ the graduates did not materialize or were filled by persons with less education.

Meanwhile, people had a way of behaving contrary to the neat assumptions of the planners: more and more babies managed to be born and to survive the perils of infancy. When reaching working age, instead of placidly waiting on the farm for the economy to call for them, many succumbed to the lure of the cities, where life, while still precarious and miserable, was not so dreary. Some of them even got pretty good jobs in the urban areas.

In the middle and late 1950's came three major changes in the approach to human resources in development planning: 1) the "high-level manpower" concept, 2) the recognition of the persistent and intractable problems of unemployment, and 3) the discovery of underemployment. The high-level manpower idea, which gained considerable currency in the United States and in international circles, followed a reasoning somewhat as follows: economic growth depends on the actions of certain types of elites--technicians, scientists, innovators, entrepreneurs, and leaders. Given a sufficient supply of such people in strategic positions in a country, they will bring the masses along with them. Therefore, most of the investment in human resource development should be directed to producing high-level manpower. Meanwhile, general education for the masses will have to proceed more slowly and wait until the economy can support such education. This idea still has considerable acceptance, as well as considerable merit. The trouble is that almost no country has been able to carry it out fully in the face of political realities and the growing demands of the illiterate masses for more education.

There are other problems with respect to the high-level manpower approach. In the first place, while there are well-developed and standardized methods of producing professional and technical personnel in the educational system, we have not yet devised ways of producing innovators, entrepreneurs, politicians, statesmen, artists, or philosophers. Secondly, such high-level manpower resources as have been developed have been attracted to advanced countries in significant numbers. This "brain drain" phenomenon is increasingly becoming the cause of concern to developing countries.

The recognition of the problems of unemployment and underemployment reached a point of general alarm during the 60's. Like Malthus in England of the early nineteenth century, some recent writers have painted a dismal prospect of the relationship between the population explosion and the corresponding food supply. Population and employment problems are among the major topics of our Seminar, and several of the faculty and guest lecturers will deal with their various facets.

In the late 1950's and early 1960's manpower planning became accepted as a legitimate, rather than an outcast member of the economic planning clan, and was fostered by international agencies such as the United Nations Technical Assistance Organization, the International Labor Office, and bilateral technical assistance programs, especially those of the United States Government. The Ford Foundation made a significant contribution to this development.

During the early 1960's, also, came the flowering of educational planning, nurtured by the Organization for Economic Cooperation and Development, UNESCO, regional organizations of the United Nations and, on the part of the United States, by the Agency for International Development, universities, and foundations. This has been a major contribution to economic development, and is a manifestation of widespread acceptance of the importance of the manpower factor in development. The methodology worked out by various scholars for forecasting manpower requirements and converting them into educational inputs and outputs is a valuable tool. The main danger is that this, like other such approaches, has been overdone in some instances and used in an uncritical way never intended by its originators. We may be in danger of producing a cult of educational planning, much as there has existed a cult of economic model building.

The OECD has stimulated a new concept in manpower development in the last few years--"the active manpower policy." This can be described as an effort to use a variety of tools and resources to meet manpower shortages and to maximize manpower utilization. One of our faculty members, Mr. Merson, has modified this to include the employment concept emphasized by the ILO, and he will describe for you in some detail what he calls "an active manpower and employment policy."

PROBLEM SOLVING IN MANPOWER

Meredith B. Givens

CONCEPTS OF MANPOWER

Members of this Seminar come from many different national environments and from economic situations in varying stages of development. You also have a wide variety of duties and responsibilities at home which relate in different ways to problems of manpower, its development and utilization. But there is one thing all of us have in common, and that is a concern with manpower as a factor of production, a dimension of development, an element of all of the purposeful activities of society. Manpower is not a problem which exists by itself; it must always be considered in relation to something else. It is a dimension of all organized activity.

There is an historic tendency for manpower to be taken for granted, to a greater or lesser extent, by planners and developers, by administrators and managers, and by people in general, in the sense that manpower problems are either neglected or handled in the short run, and are too often undertaken on an emergency basis. For these very reasons, as we know, manpower problems often become bottlenecks, just because they have been neglected and are not properly understood.

In discussions such as this, in which matters of concept and theory are dealt with at some length, it might be helpful to reflect on the relationship of the theoretical to the practical in tackling the manpower problem. Let us consider the complexity of the manpower field. If manpower is a dimension of every program and organized activity, then the manpower specialist must also be a manpower generalist and must be able to coordinate and communicate effectively with the numerous pertinent government agencies and private institutions. Effective communication implies a common basis for communications or a universe of discourse, wherein acceptance of basic ideas and language-usage underpins the discussions between colleagues and conferees.

GROWING LABOR FORCE AND GROWING UNEMPLOYMENT

The children born today will add to a labor force already underutilized. The demographic facts indicate that an annual population growth of two and one-half percent contributes three percent annually to the labor force. Some countries exceed this rate. The problem could assume burdensome dimensions for future generations unless basic education and flexible, convertible skills are emphasized among today's youths to meet evolving occupational opportunities and requirements.

The inevitable growth of the labor force during the decades just ahead leads us to recognize the corollary problem of growing unemployment. Under traditional agricultural conditions, unemployment is largely hidden in the rural economy, where almost everybody is employed at least briefly at some time or other during a crop cycle. Two major factors are modifying this situation: l) the shift of rural population to industrializing regions, which is motivated by the quest for higher wages and fuller employment; and 2) the push to reduce labor input per unit of output in agriculture. Thus, much of rural underemployment is being converted into urban unemployment, while at the same time the urban sector is failing to increase the number of available jobs.

In the long run, economic diversification is necessary for economic growth. In the short run, however, this does not result in employment expansion. That modernization does not promptly increase the level of employment is a bitter pill. The essential reason for this anomaly is the fact that modern industry is inherently competitive, internationally if not domestically, and hence a premium is put on the adoption of advanced technology and attainment of high productivity, including the employment of labor-saving devices. Only an increase in the scale of production can offset the depressing effect which often occurs in employment levels. However, increases of scale, in turn, generate new opportunities and pressures for further economies in mechanization and labor saving.

In this pattern the use of labor-intensive methods is only a palliative and, as such, is best adapted to noncontinuous operations, such as construction and the like. But while modernization must not be interfered with, other supplemental devices to deal with the manpower surplus can be used. Thus, national service could absorb some of the labor surplus while providing a means for undertaking developmental projects. Many approaches are possible in the concept of a national service. In the first place, national service need not be compulsory. Such a volunteer system is currently under study in the U.S. Department of Defense. Another approach would be to tie some compensation to national service. In Iran, public works projects have been successfully undertaken as an activity of compulsory military service. And the International Labor Organization, though in general opposed to involuntary servitude, has been engaged in extensive research on national service as a means of relieving manpower surpluses.

PROBLEM SOLVING--FOCUS ON QUESTIONS NOT ANSWERS

Our most important problems in manpower planning are not those which we can solve fairly readily with accumulated know-how but those which elude solution but must nonetheless be confronted and attacked. Attention must also be focused on those problems which must be continually re-solved as the situation changes. It is the capacity to identify key problems, to define them correctly, and to go about the quest for solutions, or to discredit false solutions, that I believe to be our most urgent challenge. Some solutions in the field of manpower may create as many problems as they alleviate, Social insurance schemes, for example, create a number of problems unrelated to the ones for which they are designed. Among other things, they interfere with the mobility of labor and affect the wage structure.

Some key unsolved manpower problems are:

1) Discriminatory pay scales and incentives, along with unreasonable discrepancies in compensation at different levels of skills. Salary and wage surveys can point up these anomalies most usefully when combined with some scrutiny of the effectiveness of management, morale, and productivity. A corollary problem, which has developed a reaction to existing inequities, is the familiar "brain drain" phenomenon.

2) Too often have new lands been made available for resettlement, only to remain barren because the people could not be convinced that it was in their interest to move. Therefore, a parallel system of incentives aimed at the resettlement of rural populations should be set up to match that established for industrial workers.

3) Perhaps the most crucial manpower problem exists in unnecessary rigidities in the labor market, associated with transferability of skills between occupations. This stems from an intransigence to new patterns and is grounded in a traditional view of education as a means of escaping certain kinds of work. Such rigidities can be exposed by occupational analysis and research to develop job "families" based on similarities in skills and unit operations performed by workers in both traditional and modern technological environments.

RELEVANCE OF EXPERIENCES IN DEVELOPED COUNTRIES

In any exercise such as this Seminar, our raw material is a combination of theory, history, and comparative analysis. Each of you is comparing his own experience and problems with those of others, with the established doctrine (if there is one), and with records and interpretations of the past. Since the range of contemporary experience represents all stages of development, some comparison with another country's experience can usually be found relevant. But it is important to take the past experience of "developed" countries with a grain of salt, for Western institutions may only have partial relevance to your particular current problems.

Take, for example, the public employment services of Europe and America. A conspicuous element of manpower policy, they have their origins in the employment exchanges of Great Britain which were developed as marketing devices to bring together labor demand and supply. Of major concern in setting up these exchanges were the time lags then existing between separation and re-employment of workers engaged in casual employment--especially on the docks. Later, the focus of employment exchanges broadened to include reduction of seasonal slumps and regularization of employment in industry and the trades. Even later, the concern shifted from minimizing cyclical unemployment to financing periods of unavoidable unemployment. This cause was taken up by labor unions and the government, which together developed various forms of social insurance systems.

Public employment services then turned to the problem of structural unemployment, a new form of unemployment brought about by cumulative changes in advanced technology. This is the situation which we face today, and it represents not the irregularity of employment from a lag between jobs but rather the outright elimination of jobs with the appearance of new methods of production.

Thus, it can be seen that the response of institutions varies according to changing conditions, and while the lessons of experience may provide helpful guideposts, the key problems in our rapidly changing world are largely without precedent.

POPULATION GROWTH AND NATIONAL POLICIES

Everett S. Lee

POPULATION GROWTH

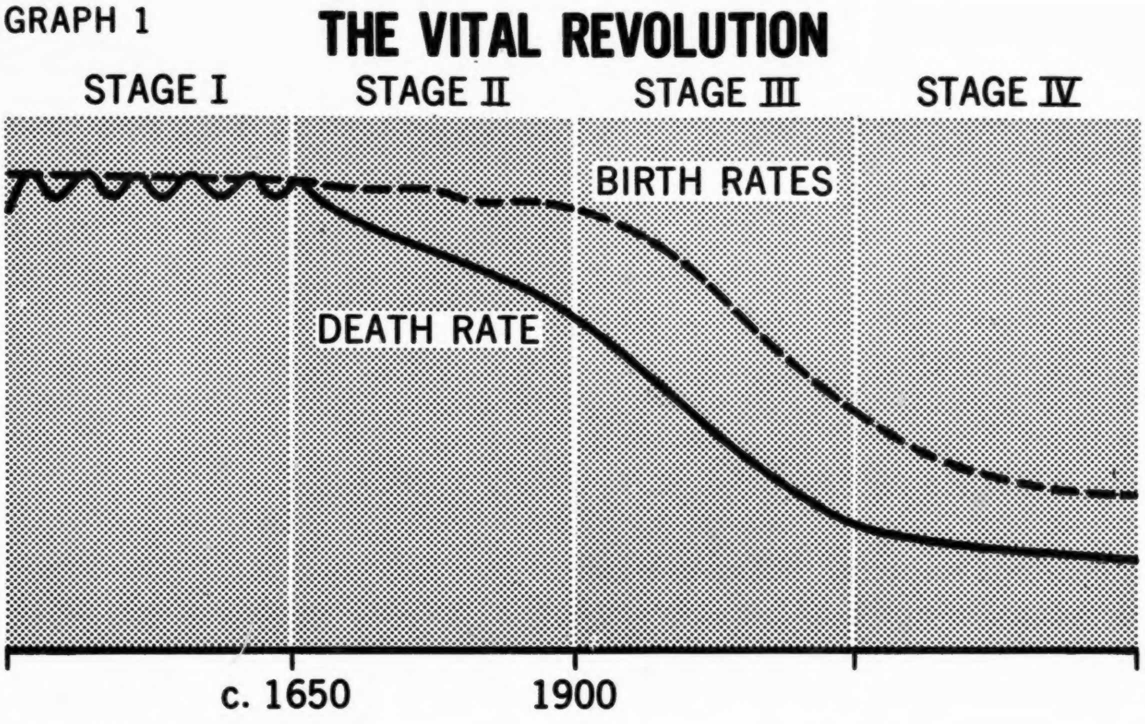
The world's population is currently growing at its fastest rate in history--averaging slightly more than two percent annually. If the present rate of growth continues, the population of the world will double every 35 years, resulting in seven billion people in the year 2000, 14 billion in 2035, and 28 billion in 2070.

Developed versus Developing Countries

In the developing countries the rate of population growth is an alarming three percent, sometimes three and one-half percent, whereas in developed countries it is about one percent. The developed countries can, therefore, invest heavily in human resources; this is impossible in developing countries where the increase in GNP must be utilized to support the rapidly growing population.

In developed countries, the historic pattern of population growth has conformed fairly well to the model on the opposite page. It is referred to as the demographic transition or the vital revolution.

GRAPH 1



In stage I the birth and death rates were both high. One-third of those born were dead before the age of one, one-half before the age of 12. Population growth was low and erratic.

In stage II the death rate dropped considerably with improved sanitary and socioeconomic conditions. However, the birth rate continued at a high level, as improved health conditions also increased the ability to bear children. Thus, the rate of population growth was high and rapidly increasing.

In stage III of the vital revolution, the death rate continued to drop. The birth rate also experienced a decline, and general population growth, though still fairly high, began to decrease.

In the final stage, birth and death rates are low. Population is again growing slowly but more efficiently. In stage IV, only two to three percent of the children die before the age of one, 95 percent survive into late childhood, and 90 percent survive through childbearing age.

Distribution of the World Population

The disparity in rates of population growth is changing the ethnic balance of the world population. One of the major reasons for European domination in world politics is, of course, European technological superiority, but it should not be forgotten that Europe went through the vital revolution before the rest of the world. Today, the European population grows slowly, as in stage IV of the vital revolution, while Asians, Africans, and Latin Americans are experiencing stages II and III of the demographic transition.

DISTRIBUTION OF THE WORLD POPULATION

Year	Developed Countries	Less-Developed Countries
1900	36%	64%
1965	30%	70%
2000 (est)	20%	80%

NATIONAL POLICIES REGARDING POPULATION GROWTH

A country can take measures that affect both the quantity and quality of its population. Some states have attempted to increase the rate of growth, others try to slow it, while still others focus attention on the quality rather than quantity of the population. On the whole, these programs have been ineffective, often because they are based on misinformation. Differences in the aims of a government and the desires of its people can also account for the failure of such programs.

Policies Which Encourage Population Growth

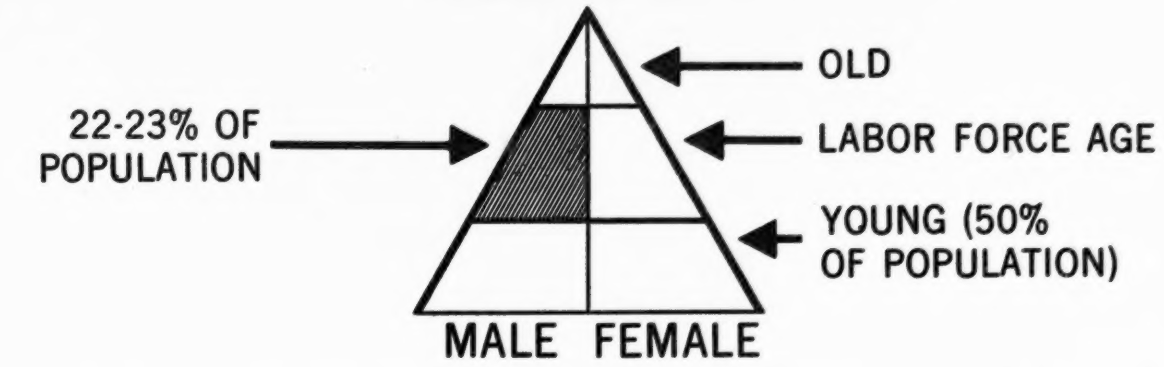
In the past, many nations have tried to encourage the growth of population, and some nations still do, either by reducing the mortality rate or increasing the birth rate. Measures to reduce mortality rates can be carried on very inexpensively through sanitary measures, insect eradication, modern medicine, etc. These bring about startling results. In Ceylon during the post World War II period, the Government conducted malaria eradication campaigns. In one decade, the death rate dropped 50 percent.

Few countries have deliberately attempted to increase fertility, but France embarked on a population growth campaign in the 1930's, and still maintains an elaborate system for encouraging large families. There are laws against abortion and against the sale of contraceptives. The Government offers generous family allowances, so that a metal worker with six children, for example, can more than double his wage. Nevertheless, the birth rate in France remains low.

Policies Which Discourage Population Growth

In developing nations, the need has been for a decrease in the rate of population growth. If the population increase is proportionately greater than the increase in GNP, per capita income decreases, and little is available for investment in capital equipment. The mortality rate of many of these countries, in particular the infant mortality rate, has dropped considerably. This, along with the high birth rate, increases the proportion of young people in the country as illustrated in the pyramid at the top of page 17.

GRAPH 2 TYPICAL POPULATION STRUCTURE IN A DEVELOPING COUNTRY



The large base indicates that half the population is under 15 years of age. Of the labor force age group, females are occupied with childbearing and rearing and cannot enter the labor force. The gainfully employed labor force is thus nearly entirely male and only 22 to 23 percent of the population.

If the birth rate were reduced, by measures such as legalized abortion as in Japan and Eastern Europe, or by other birth control programs, the percentage of young people would decrease, and the number of labor force age would increase.

However, many birth control programs currently administered in developing countries are not very effective. In India, for instance, an inadequate allocation of funds has prevented a successful sterilization and birth control program. On the other hand, in the Republic of Korea, where birth control programs are adequately financed and properly administered, the birth rate has dropped 50 percent within 10 years.

Spreading the Burden of Childbearing

In other countries, the major aim of national population policies is to spread the economic burden of childbearing more evenly throughout the population. In Sweden, for example, both large and childless families are discouraged. Birth control information is given in the lower grades of school, and there is a complex system of family allowances, maternal and child care, and other health programs. In a variety of ways, single people are made to carry the cost of childrearing.

Population Control Through Immigration and Emigration

Governments can regulate population growth by either encouraging immigration or emigration. Though this may be an easy method to administer, it is not the answer for rapidly-growing countries. Countries which encourage emigration lose the best of their people. These represent a major gain to the receiving country, as emigrants are generally males mentally and physically above average and at the age of maximum economic productivity. In the United States, for instance, the foreign-born have had lower mortality rates during the younger ages than native whites. They also have had lower rates of mental disease. This "brain drain" can be serious to a developing country. The receiving country is the gainer.

Countries which have attempted to use immigration and emigration as a means of population control are Australia and the Netherlands. Australia has made efforts to encourage immigrants by offering subsidies. Immigrants must meet health and mental requisites. Migration to Australia has been primarily from certain European countries. The Netherlands offers subsidies for those who will leave the country.

IMPROVING THE QUALITY OF THE POPULATION

Attempts to improve the quality of the population through genetic measures have been almost completely abandoned. It is now realized that the quality of a population depends upon environment as well as upon genetic factors. Improving general living conditions is one means, but education is the crucial element.

POPULATION GROWTH AND REDISTRIBUTION IN RELATION TO EMPLOYMENT PROBLEMS

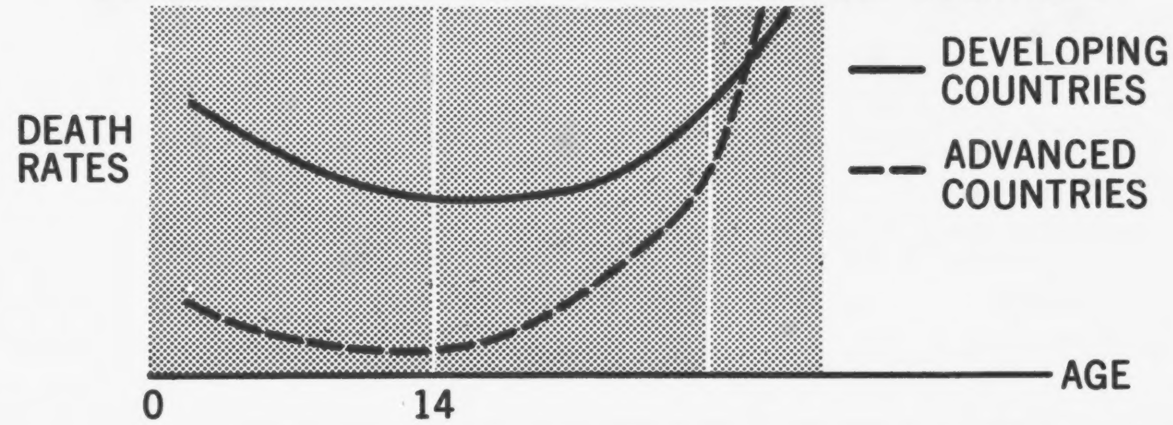
Everett S. Lee

TYPES OF POPULATION STRUCTURE ARISING FROM DIFFERENT KINDS OF GROWTH

In developing countries, the infant mortality rate is high. One of every three children dies during the first year of life. By contrast, the death rate during the first year of life is 25 per 1,000 in the United States, and as low as 15 per 1,000 in Sweden. In these countries, the death rate is even lower prior to age 14. After this, however, the patterns of death rates in developing and advanced countries are similar for two main reasons. In the first place, the surviving population in developing countries may be a constitutionally hardier breed than the surviving population in advanced countries, in which childhood survival has not been put to such a rigorous test. Secondly, the demands of life may pose severe strains on the populations of developed countries and may take their toll in later life.

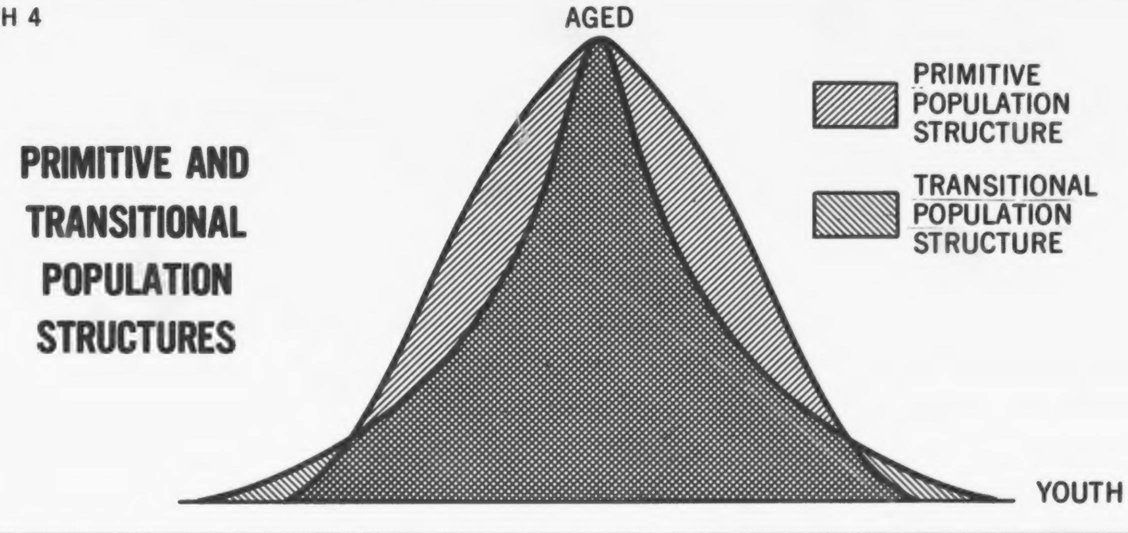
A closer examination of death rate patterns in the first year of life in advanced countries shows that if death occurs within an infant's first year, the chances are one in five that this will happen on his first day. Should a person die before age 45, chances are one in 10 that his death occurs on the day he is born. This high proportion of deaths immediately following birth in advanced countries results in the elimination of many genetically defective children. In developing countries, however, a greater number of birth accidents result in a larger number of defective persons.

GRAPH 3



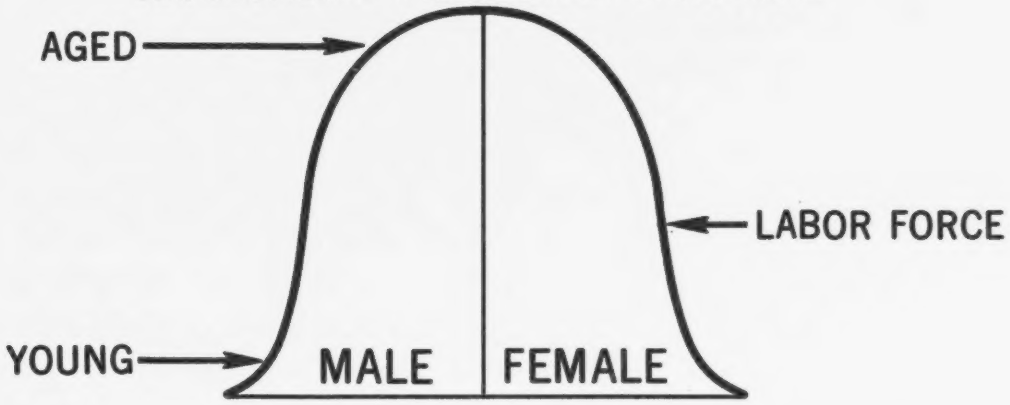
Primitive cultures exhibit high birth rates as well as high death rates. Transitional societies show continuing high birth rates and diminishing death rates among children. This means a large increase in the surviving youth as well as an inevitable upswing in the number of people entering the labor force of the future. Such a situation exists today in Indonesia, where the present 20 to 35 year age group approximates in size the 18 to 65 year age group of 20 years ago.

GRAPH 4



On the other hand, the bell shaped population curve, characteristic of some developed countries, most nearly resembles an economic type of population. In these countries, labor force replacements are added with maximum efficiency, and a near equilibrium between birth and death rates is achieved. Sweden's annual population growth rate of one-half percent and zero net gain in population over the long run illustrates this balance.

GRAPH 5 THE BELL SHAPED CURVE OF AN ECONOMIC POPULATION STRUCTURE



FALLING FERTILITY RATES AND THE FEMALE LABOR FORCE

Because of higher death rates, more children must be born in developing than in advanced countries in order to sustain the population. This involves enormous waste as well as human suffering. Given the high infant mortality rate in the least developed countries, mothers must bear six children to sustain the population. This figure closely approaches the estimated maximum possible number of births per mother in these countries.

In the case of Sweden, on the other hand, 90 percent of the girls born alive survive through the later childbearing period. Another 10 percent never marry, leaving 80 percent of the women born to accomplish the total childbearing of the country. To sustain the population, each married woman should bear 2.6 children, of which 1.25 are daughters.

In the primitive model of developing countries the cost of childbearing and childrearing is high, especially when related to the small proportion of children who reach an economically productive age. The cost of childbearing and childrearing in advanced countries is also high, but it is considerably more efficient in that it is applied to preparing children for economically productive lives rather than to merely keeping them alive. In addition, it does not require as much active participation at home on the part of the mother. Fully 50 percent of the female population can be freed, therefore, for labor force participation.

Past and present labor force trends for women in the United States are illustrated. Formerly in the United States, women joined the labor force between the ages of 14 and 18 to 20, when a peak of 50 percent of the women participated. But from that age onward, women left the labor force to raise families and never returned. At the present time, however, women return to work as their children enter school, so that by age 45 their participation peaks close to the 18 to 20 age levels. The average American woman's family-rearing experience is approximately as follows:

Average age at:	Age
Marriage	20
Birth of first child	22
Birth of third and last child	26-30
All children in school	34
All children in college or working	45

The trend of increasing female labor force participation is likely to continue. In some European countries and in the Soviet Union, for instance, where the problem of child-rearing has been minimized through wide-scale use of cooperative nurseries, the participation rates are even higher. Moreover, changes in the overall work patterns of advanced countries, including a tendency towards a six-hour workday, as well as the growing number of jobs which have opened up to women, will greatly ease labor force participation for mothers.

CHANGES IN POPULATION STRUCTURE

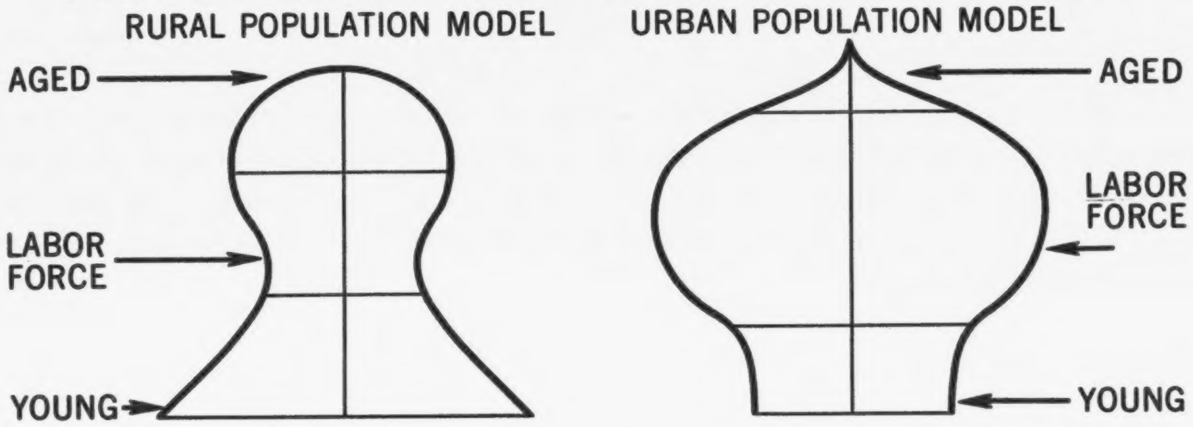
Developed countries show fluctuations in the birth rate and rate of entry in the labor force--in a pattern of opposing cycles. During the great depression in the United States, labor force entries were at a high level as a result of the post-World War I "baby boom," but the birth rate at that time was low. Following World War II, the low birth rates of the 1930's produced smaller labor force entries. At the same time, another postwar baby boom appeared. These are illustrations of alternating peaks of births and labor force entries. In primitive economies, however, the birth and death rates are more constant, and the cycles of birth rates and of entry in the labor force show less fluctuation.

Western countries are experiencing a considerable aging of their populations. Two-thirds of the children born will live to age 65. Entering the labor force at an average age of 20, they are able to accumulate 45 working years before reaching the mandatory retirement age of 65 (42 working years for women, with a mandatory retirement at 62). This leaves an average of 13 years remaining before death, during which time these older persons are retired. For a social security system to adequately shoulder the burden of supporting retired workers, provision must be made for three months of retirement for every year worked. The magnitude of this burden is apparent in advanced country labor force statistics, which show a ratio of one retired person for every three persons of working age. In the future we may well reach the point where 20 percent of the population in the Western world is over 65. The possibility that such a sizeable portion of the population will be nonproductive calls for a re-examination of current retirement practices, with close attention focused on whether the demands of modern industry are really excessive after a certain age. Indeed, preliminary investigations show older workers as steadier and more productive than their juniors.

RURAL-URBAN MIGRATION AND POPULATION STRUCTURE

Basic to the problem of migration from farms to cities is the fact that the great majority of those who leave the countryside are young people in their late teens. The proportion migrating drops sharply after age 25. Remaining on the farms is a high proportion of older people and young children. The urban population model presents a contrast to the rural model, showing a reverse tendency in age distribution.

GRAPH 6 **THE URBAN POPULATION STRUCTURE IN DEVELOPING COUNTRIES PRESENTS A DIRECT CONTRAST TO THE RURAL STRUCTURE**



The exodus of persons in the prime of life has generally not caused a reduction in productivity in the rural areas. This indicates the extent of underemployment that prevails in agriculture. The question of whether to continue permitting complete freedom of population mobility is a difficult one. When a similar migration occurred in the West, the exodus from the farms happened to coincide with a growing demand for labor in the industrializing cities. If present migration trends continue in the developing countries, the inevitable result will be urbanization regardless of industrialization. On the other hand, would there be a gain to the economies of the countries if these migrants could be persuaded to remain on the farms? Unemployment might merely be less visible. In the long run, we would simply be increasing the size of the marginal rural labor pool, which will be more ready than ever to surge towards the attraction of greater opportunities in the cities.

The problem resulting from the redistribution of population from rural to urban areas centers on the fact that the cities are currently not ready to absorb the immigrants. This is true in developing, as well as in advanced countries. The only difference is that the resulting slums grow around the cities in many developing countries and rise in the heart of the cities in many advanced countries. In the United States, we have been especially unprepared for the influx of Negroes in urban areas. Unfortunately, these people began to migrate in great numbers after the peak demand for unskilled workers had passed.

THE POPULATION PROBLEM AND ITS EFFECT ON MANPOWER

Joseph A. Cavanaugh

CAUSES OF OVERPOPULATION

The divergence in the birth and death rates in low-income countries has been often cited. Statistics quoted range from 45 to 60 per 1,000 population for the birth rates and from 10 to 20 per 1,000 population for the death rates. This divergence will lead to net population increases often in excess of 3.5 percent per annum. Lack of knowledge of contraceptive techniques is a commonly cited cause of the problem. Resistance to planning methods of both an ethnic and a practical nature are prevalent in many low-income areas. This might be called a resistance to cultural change or a cultural lag.

As in many high-income countries, there may be many and varied incentives for more children. The incentives may be either of a financial or economic nature, for instance, income tax laws favoring large families or the advantages of having a large family work force on a farm.

Administrators often cite statistics to prove that low-income countries are not overpopulated relative to available land resources. These figures are misleading, if not incorrect, since they are aggregates and thus give us no indication of the increasing rate of urbanization prevalent in these countries.

CONSEQUENCES

The most apparent consequence of the "population problem" is that of inadequate food supplies. More food is needed to support the growing population, and in most low-income countries, agricultural productivity has not kept pace with population increases. Common examples of this problem exist in India, where massive imports of wheat have been necessary.

A high rate of population increase will also reflect adversely on gains in the per capita income, since increases in the GNP are immediately absorbed by increases in the population. As the birth rate grows, furthermore, the proportion of the population in a dependency status also increases. Most low-income countries appear to have rather high dependency ratios.

Without concurrently growing manpower in the field of education, another logical outcome of the population problem is a proportionate decrease in the literacy level. Studies by UNICEF have supported this in most low-income countries.

Increasing social problems appear to be a consequence of the population problem. These, of course, take many forms ranging from extreme poverty to delinquency.

Child care and medical assistance cannot keep pace. When these facilities do not grow along with increasing population, the result is often a high infant mortality rate.

CONSTRAINTS AGAINST POPULATION CONTROLS

Many social customs, such as early marriage, pose serious obstacles to the correction of the problem. Early marriage results in the statistical probability of higher fertility rates. Another obstacle to correcting the population problem, not often realized, is the lack of demographic knowledge available to appropriate government agencies. This lack of knowledge may be a mere absence of information, or it may be connected with faulty statistical techniques. In either case, the result is an inability to diagnose and correct the problem.

The lack of facilities for implementing family planning programs is one of the most apparent constraints. Many low-income countries feel that all such facilities should be public, thus delegating the entire responsibility to the governments which seldom have the necessary resources. The lack of manpower necessitates new methods of contraception which do not require the services of trained medical personnel. Research is in progress on such methods, and they may be the answer to at least some of the problems experienced here.

While religious constraints are in many cases more apparent than real, the fact is that they do play a real role in many countries and must be reckoned with in any program dealing with family planning.

UNITED STATES POLICY

Domestic

Until recently, the United States has had no official policy with regard to family planning. Last year, however, such a policy was proclaimed with reference to family planning in the United States. The main elements of this program are:

a) Participation in any family planning program is to be strictly on a voluntary basis--no coercion of any sort may be used to induce people to participate.

b) Persons participating in any of the programs are free to choose among the available devices.

c) Family planning is not required as a prerequisite to the receipt of benefits from other Government programs.

d) All policies advocated must conform to present medically-accepted techniques.

d) Where state statutes prohibit the use of contraceptive devices, the rule of the state remains sovereign.

It cannot be overemphasized that the aim of United States family planning policy is not simply birth control for the reduction of population increase. It is viewed as a means to increase the stability of the family as a unit.

Foreign

Last year, the United States also adopted an official program with respect to other countries, the main elements of which may be summarized as follows:

a) No nation should be coerced to sponsor programs of family planning.

b)AID stands ready to assist any nation which desires technical assistance in this field.

c)AID also stands ready to send teams to survey demographic factors to any country requesting them.

d) Requests for assistance should be made through the American Embassy or the AID Mission in a country.

POPULATION AND MANPOWER

Population and manpower policies should not be approached as separate entities but should be linked and coordinated. Fertility affects manpower.

a) Where high fertility exists, the proportionate size of the labor force is generally smaller than where low fertility prevails.

b) High fertility often means low skill levels and low average educational attainment. This may be attributed to the low educator/population ratio.

c) Accompanying high fertility rates, one finds a marked rise in the number of new entrants into the labor force.

d) Where low fertility rates prevail, the proportion of women in the labor force is usually higher than where high fertility rates prevail.

e) High fertility rates may often be found in conjunction with labor shortages, particularly in the professions and in skilled labor.

f) The proportion of new entrants to the total labor force tends to stabilize in areas with low fertility, whereas the former tends to increase in relation to the latter in high fertility regions.

MANPOWER PROGRAMS AND THE CRISIS IN FOOD PRODUCTION IN DEVELOPING COUNTRIES

George L-P Weaver

I would like to discuss in some detail food production as it affects manpower planners. Experts say that by 1985 man's greatest crisis may arise from his failure to perform the elementary task of feeding himself. With the natural increases in population in future years, the combined productivity of existing acreage will not meet the needs of developing countries.

DIMINISHING FOOD SUPPLIES

The above statements have been made many times in the past, but people are just recently beginning to focus on the problem. The Economic and Financial Committee of the United Nations has approved a study of methods of combating hunger. Other United Nations organs such as the World Food Program and the Food and Agriculture Organization are intimately involved in this area. The United States, which has always been concerned about food shortages, recently has stepped up its commitment. On October 24 of this year it was announced that after July 31, 1967, the United States would match all of the food or money contributions by the rest of the developed world. We have already pledged $130 million over the next three years.

The situation has been exacerbated by conditions in the developing countries. Child mortality is 60 times that of advanced countries, and agricultural productivity is not increasing. Actually it has expanded somewhat in Latin America, but only in the last two years, and these countries have still not been able to catch up with population increases. The developing countries of Africa, Latin America, and the Middle East changed from exporters to importers of food between 1930 and 1960. The fact that they once exported $11 billion more in foodstuffs than they imported while imports now exceed exports by $30 billion has drastically worsened the food situation. Food surplus areas, like the United States, will not be able to increase their exports of food enough to make up the inevitable deficits that will arise as time goes on. For example, four years ago the United States had 40 million tons of surplus food in storage, whereas today there are only 10 million despite increased acreage allotments.

THE PRODUCTIVITY GAP

A few examples will suffice to demonstrate the enormity of the productivity gap between the developed and developing countries:

Netherlands, 65 bushels of wheat/acre - Tunisia, 7 bushels of wheat/acre

United States, 72 bushels of corn/acre - Morocco, 10 bushels of corn/acre

Italy, 4400 pounds of rice/acre - Philippines, 1120 pounds of rice/acre

This gap in food productivity is not due to soil or climate. Demonstration areas in developing countries frequently produce as much per acre as developed countries. The differences result from technology, planning, quality of seed, and the utilization of machinery. These things combined with modern methods of storage, processing, and distribution can revolutionize the living standards of half of the people of the world.

Agricultural modernization is bound to conflict with industrialization. India, for example, has made a major thrust in agricultural improvement in the last year, and there was severe conflict within the planning agency. These conflicts are inevitable given human nature, but the people who favor rapid industrialization should not lose sight of the fact that a nation must be able to feed itself.

MANPOWER PROGRAMS AND THE WAR ON HUNGER

Experts are divided on the solution to the food shortage problem, but they do agree that the efforts of developing countries to industrialize are compromised by the necessity of spending scarce foreign exchange on food, and that the developed nations are rapidly reaching their productive capacity. There is room for more scientific, productive farming in developing countries. Because they have neither the time nor the money to open up new areas, they must depend upon new technology to increase the productivity of existing areas. If these efforts are to succeed, labor ministries must be involved in the following areas:

1) Vocational training to implement rural modernization.

2) Planning for labor force displacement. If the modernization of agriculture takes place, it will be a fundamental task of many agencies to cope with resulting employment changes. Many people will, of course, migrate to the cities, but new industries will locate in the rural areas as well. Under these conditions labor ministries should play a vital role.

3) Labor ministries must anticipate and guide increases in productivity in order to insure that they keep up with population increases. There will be jurisdictional disputes in this area, especially with industry, but again the labor ministries must be involved.

2. Guidelines for Planning

THE CONCEPT OF HUMAN RESOURCES PLANNING: A NEW APPROACH

Bernard Fortin

INTRODUCTION AND DEFINITION

Since the early 60's there has been much talk about human resources, but the concept itself has rarely been defined; it has been made synonomous with manpower, or the flow of students from educational institutions, or the total population, or even everything which is human (the human factor). For the purpose of this lecture, the following definition is proposed: "men or women who are in the labor force, or are preparing themselves for the labor force, with their abilities and motivations." This concept includes the notions of employment creation and skill formation. Abilities imply innate and acquired aptitudes and qualifications; motivations imply attitudes and incentives.

THE INTERNATIONAL LABOR OFFICE AND MANPOWER PROGRAMS

In the decade 1950-60, the programs of the ILO were concentrated on the industrial sector, and on such projects as manpower surveys, experimental employment services, and assessments of qualitative and quantitative manpower shortages. Efforts usually consisted of one-time pilot projects. Their corrective or instructive measures were short-run; the projects were not integrated in the framework of economic planning.

After 1960, a distinct change of emphasis became noticeable in ILO activities. The increase in formal economic planning in developing countries compelled a long-range outlook with a continual analysis of the manpower situation which included forecasting. Goals and targets were established for employment as well as training. Concurrently, it was realized that the economic factors involved in manpower planning were far more numerous than had hitherto been realized. It became apparent that wage policies, monetary and fiscal policies, productivity, and international trade all affected human resources planning. Experts realized, furthermore, that non-economic considerations played an important role--i.e., social, political, and cultural factors had to be taken into account in human resources planning.

THE STAGES IN HUMAN RESOURCES PLANNING

Development is change and implies transformation of economic and social patterns. Human resources planning is concerned with the rational analysis and organization of all elements having a bearing on the transformation of the present and future pattern of human resources. It sets goals for such a transformation and specifies the means to attain these goals. It comprises three basic operations:

1) Diagnosis--What type of human resources are we dealing with? What are they? What is their quality? What is the size and distribution--regional, industrial, occupational--of the labor force? What will happen if nothing is done?

2) Target Setting--What are the objectives of the economy and society? How much change is involved? Are the resources available for this change? Can the social system endure it? What would be the optimum situation for the future? What can we reasonably expect to accomplish? What are the alternatives? Which should get priority?

3) Implementation--How do we bring about change? Two series of instruments are available: the first, for employment creation and development, the second, for skill formation and development. In the field of employment, there are such instruments as public investment policies, wage policies, export policies, and--on the micro level--intensive staffing and shift work. In the field of skill generation, instruments to increase the capacity of existing educational and training facilities are fiscal policies and appropriate technical legislation. Instruments to increase the utilization of such facilities and the efficiency of manpower are the whole array of financial and non-monetary incentives, the organization of the employment market and education and training programs.

MANPOWER AND EDUCATIONAL PLANNING

No country has yet conceived of human resources planning from such a broad point of view. Even in centrally planned economies, manpower planning has not used this array of instruments in a systematic way. It may be that this approach would entail such drastic changes in government institutions and work habits that it would be impracticable. Yet, so many scarce resources are wasted for lack of a proper "system" of employment generation and skill formation, that it would be worthwhile trying to adopt "a new deal" in these matters. One could start in a pragmatic way, e.g. looking at the relationship between such "traditional" operations as manpower planning and educational planning.

The following chart, which tries to distinguish between these two operations, shows that they overlap at least in the center triangle. One could even demonstrate that all functions are inter-related. One practical conclusion could be derived to start with, namely that the assessment of the present and future situation of manpower resources and needs for economic and social development should be a common operation to both planning activites.

UNSOLVED PROBLEMS IN HUMAN RESOURCES PLANNING

The human resources planner is consistently faced with a number of problems for which the solutions cannot be prescribed in advance. One of these is the need to improve the coordination of human resources planning with general economic development planning and to improve the integration of the two. What are the interactions between economic and employment patterns? Are employment objectives deduced from economic objectives? Is there an employment supply effect on production target-setting? Another problem is how to take account of and, if possible, quantify the non-economic objectives. Solving the problem of competing goals is another challenge. Should one concentrate on the young at the expense of the old? Should one compromise economy to train the underprivileged and handicapped, or work only with those who are not disadvantaged? Decisions also have to be made regarding the importance of investment needs versus consumption needs.

A number of technical problems also have to be solved. How does one translate occupational requirements into skill requirements? Is it possible to build up a coherent set of economic, employment, occupational and educational matrices? How does one forecast productivity trends? How does one take into account various levels of technologies?

The rule of thumb, which is always subject to considerable risk, is very often necessary. Models are useful but they are not completely reliable. The danger peculiar to model-building is that the result may easily convey the impression of finality which it does not possess. There are too many variables in human resources planning which are difficult to build into a model, even if it were possible to predict them accurately in advance.

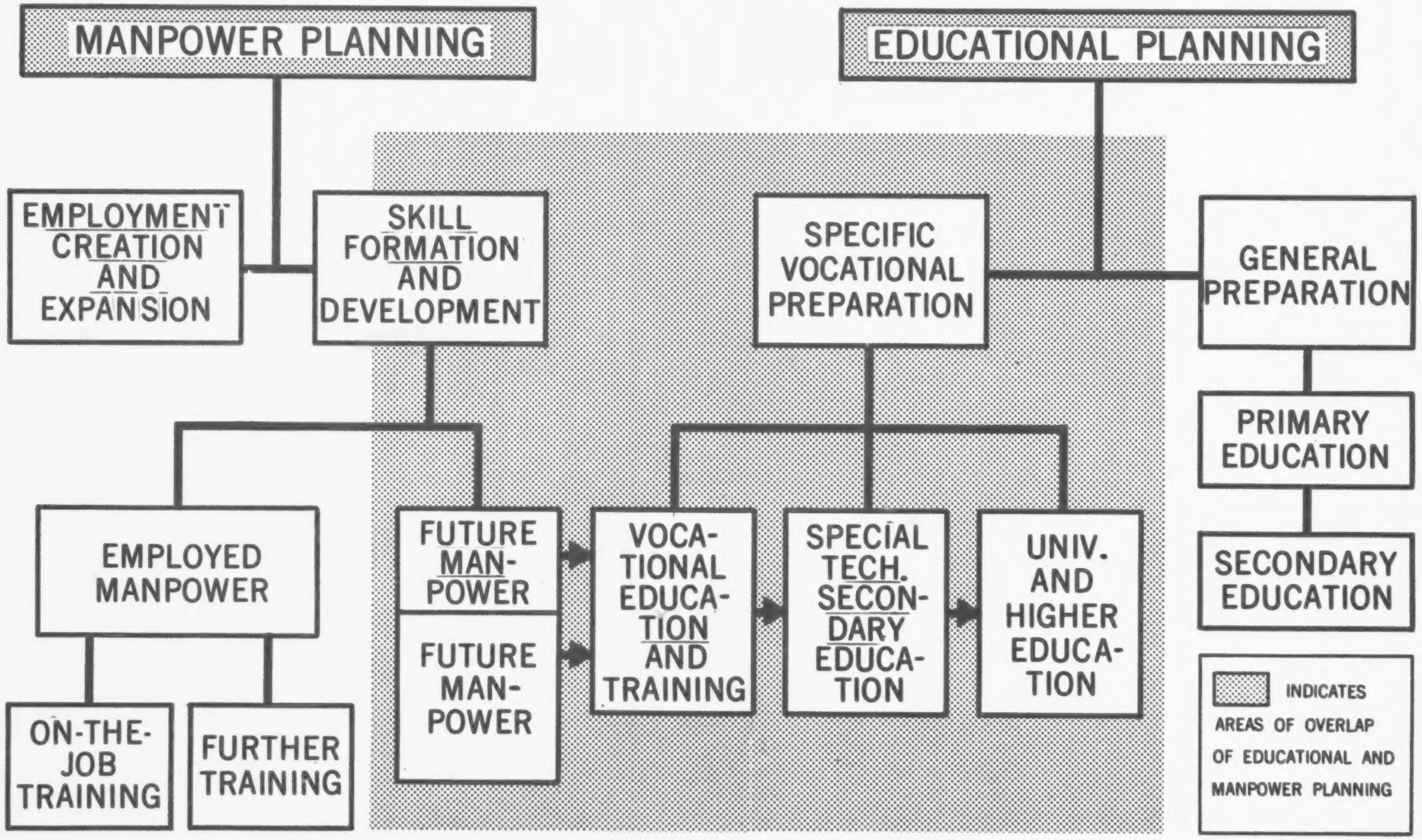
THE OTTAWA PLAN

A comprehensive Plan for Human Resources Development in the Americas was adopted at an ILO-sponsored conference held in Ottawa, September 12-23, 1966. Two unanimously adopted resolutions emerged from the conference. They called for countries of the Americas to formulate concrete plans for the employment and development of their human resources and asked that these plans be fully integrated with policies and plans for overall economic and social development and education. Financial and material means for implementing the plans should be considered.

The Ottawa Plan for Human Resources Development will involve the ILO in a number of ways. The conference asked the ILO to formulate, as well as coordinate, manpower programs upon request of individual nations, and to establish a technical commission or other body for manpower planning for Latin America and the Caribbean to help implement the program. The body would be composed of specialists from countries of the region as well as representatives from workers and employers, and experts from the ILO.

GRAPH 7

THE RELATIONSHIP OF EDUCATIONAL AND MANPOWER PLANNING


MANPOWER PLANNING
EDUCATIONAL PLANNING
EMPLOYMENT CREATION AND EXPANSION
SKILL FORMATION AND DEVELOPMENT
SPECIFIC VOCATIONAL PREPARATION
GENERAL PREPARATION
PRIMARY EDUCATION
SECONDARY EDUCATION
EMPLOYED MANPOWER
ON-THE-JOB TRAINING
FURTHER TRAINING
FUTURE MAN-POWER
FUTURE MAN-POWER
VOCA-TIONAL EDUCA-TION AND TRAINING
SPECIAL TECH. SECON-DARY EDUCA-TION
UNIV. AND HIGHER EDUCA-TION
▨ INDICATES AREAS OF OVERLAP OF EDUCATIONAL AND MANPOWER PLANNING

MANPOWER PLANNING--A CONCEPTUAL FRAMEWORK

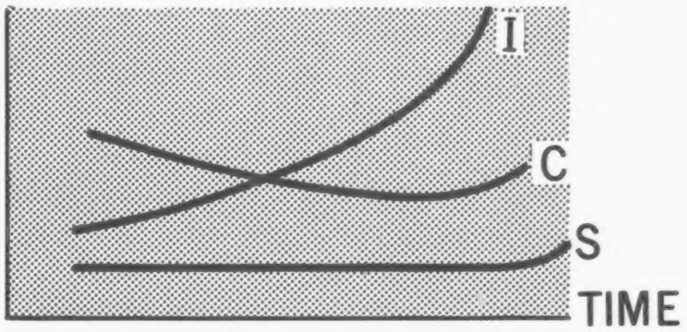
S. Clifford Kelley

THE STATE OF THE ART

In analyzing the state of the art of manpower planning, we find it not very highly developed while at the same time there has been an explosive interest in the subject. If we let *I* stand for the level of national interest in human resources planning, *C* for the confidence of planners, and *S* for the state of the art, we would get the following graph.

GRAPH 8

THE ART OF MANPOWER PLANNING



The rate of growth of interest has been very rapid. Confidence, originally high, dropped sharply when the planners were confronted with the realities of situations. With respect to the state of the art, we know very little, but the slight, recent upward turn indicates that our information is being increased through experience. This approach reflects my conservative point of view.

In the past we ignored basic relationships in the planning process, and we still have little understanding of them. Since earlier economic models usually left out the quality of labor and capital, we have a limited research base today. We are not here to derive solutions, however, but to delineate the problem areas. Economic development is the goal of manpower planning. Therefore, planning *per se* is only of incidental significance without a larger framework of goals.

MANPOWER PLANNING AND ECONOMIC DEVELOPMENT

There are three main areas in which close coordination is required between economic development programs and manpower planning:

1) Changes in techniques and technology

2) Structural changes in the economy

3) Social change that accompanies development

Each of these areas has its own implications for manpower requirements and planning.

Techniques and Technology

One of the basic goals of economic development programs is to increase productivity in order to increase output and to achieve a higher standard of living. Increased productivity is a function of changing techniques and technology which create a complementary need for changing skills. Most manpower planning relates anticipated technological changes to a necessary change in the skill complex of a country.

Structural Changes and Distribution of Skills

Economic development is conceptually possible without structural changes--i.e., it could be restricted to agriculturally based development. In practical terms, though, this is without meaning because developing countries conceive of development in terms of diversification and industrialization. This is particularly so because there is a de facto move away from agriculture which in itself implies structural change.

Social Change

Structural and technological change which involves geographic, occupational, and industrial mobility necessitates social change--the formation of new institutions, values, and incentives. Social change entails cultural migration--i.e. the move from a traditional to a modern, industrial culture. The demands made by social change may well be more important than the demands made by the need for new skills.

THE DIMENSIONS OF MANPOWER PLANNING

Planning is essentially the rationalization of political priorities and decisions. Effective communication between those who make the political decisions and the central planners, on the one hand, and between the central planners and groups closer to the area of operations, on the other hand, is essential. As far as possible, decisions about politics, capital, and manpower should be made simultaneously in order to avoid wasting valuable, scarce resources. Planning must allow for short-term programs to bring up the level of unskilled manpower, long-term programs for higher skill levels, and for retraining, since some of today's occupations will be obsolete in five years.

The Scope of Planning

Within the framework outlined above, manpower planning can encompass varying degrees of detail as well as different time schedules. But there is some orthodoxy about what a model in human resources planning should look like. It is usually expected that such a model will be long-term with emphasis on occupational detail and the formal educational system.

Several criteria must be considered in formulating manpower projections. The first of these is the scope in terms of the level of detail. A simple criterion for determining the appropriate level of detail for planning is the extent to which a given occupation is uniquely related to some form of preparation. In a case where the preparation is identical for several occupations, a detailed occupational breakdown has no meaning. The purpose of manpower planning is to influence the institutions which prepare people, and thus it should relate to all aspects of an individual which influence his performance. The formal educational system is usually emphasized in planning because of high-level skill requirements, but not all preparatory institutions fall within the formal educational system. Manpower planning should include labor force mobility, migration, flexibility of workers, health requirements, and, consequently, a whole range of institutions.

The length of time it will take to influence the supply of labor is another important aspect of the scope of planning. Orthodox thought in this area favors the long-term, and the usual planning period is fifteen years. But time requisites should be viewed as a function of the conditions in a country, the levels of manpower needed, and the particular training systems available and required. If a country interested in attaining a high level of technical knowledge does not have a good base in primary and elementary educations, the necessary modifications will take a long time. In this case, where adjustments must be made from the bottom up, long-term planning is essential. Shorter term planning will be possible for a country with a good educational base. For low-level skills, it is also easier to effect the necessary modifications in a shorter period of time.

Every plan, therefore, should have different time dimensions. It is senseless to project middle-level skills for 15 years, when shorter term detail would be far more valuable. More detailed, longer term projections go along with higher skill levels. The current emphasis on great occupational detail regardless of the type of plan is a limiting factor in manpower planning.

The Planning Context

In the absence of the general planning framework, manpower planning has limited utility. Since manpower planning is dependent on industrial patterns and techniques these elements must be defined. Simple extrapolation works in advanced societies, but in developing countries future goals must first be agreed on because past experiences are not relevant to predictions of future patterns. National objectives must be stated in operational terms so that they can be translated into manpower requirements.

In the ideal planning framework, manpower decisions are closely related to other decisions. The fact that productivity and employment goals are often stated in terms of capital, with manpower requirements being regarded as a residual factor, is a great methodological limitation. Many countries determine targets in terms of capital requirements because of their awareness of a limited capital stock, but the skill stock is limited as well. Here simultaneous decisions, which take into account quality and quantity of labor as well as capital, are best.

Institutions must be related to the planning procedure when decisions are being made. However, lack of communication and division of labor frequently block simultaneous decisions. Planning should be very wide in scope--from setting goals to influencing educational systems.

The Elements of Planning

The four major elements of planning are as follows:

1) Manpower Requirements--Define future requirements in terms of occupation, health, mobility, and so forth. Projections should not be limited to occupational requirements.

2) Manpower Supply--Assess the capacity of the present system to meet these requirements. If the number of engineers is a function of university engineering faculties, then the ability of the present system to produce an adequate number of engineers of a prescribed quality must be examined. If the present system is judged inadequate, changes must be envisioned.

3) Institutional Planning--Plan the institutions that supply manpower. The criteria are manpower requirements and efficiency. It is obvious that supply institutions are not maximally efficient. There is significant waste, especially in early primary educational systems where the first grade dropout rate is as high as 40 percent to 60 percent in developing countries.

4) Manpower Planning--Formulate a manpower policy. Manpower development is a multi-dimensional and multi-institutional function. Thus, there is no single planning or supply institution. Policy should define the whole range of needs and be derived from planning criteria in order to implement change.

Alternative Approaches

In the literature, there are frequent references to alternative approaches. This argument is meaningless. There are no alternative approaches because all planning must encompass the four aspects outlined above. There are, of course, differences in technique, but these are largely related to the constraints inherent in a particular situation. Data differences are crucial. A country with only historical data and no targets would have to resort to extrapolation. If the data are limited in time, a country may have to resort to using the experiences of other countries. The limitations of this method are that, even though one may improve on the available data, one also transfers possible errors.

MANPOWER PLANNING AS AN INTEGRAL PART OF ECONOMIC DEVELOPMENT

John F. Hilliard

This discussion will attempt to point out the many facets of the planning process and to place manpower planning in the context of personal, institutional, and national problems. As a manpower planner, I have perhaps suffered from the myopia of thinking that human resource planning is the most important element of the planning process. To some extent this attitude has been supported by events in the past few years, as the importance of developing and planning human resources has become generally accepted. The manpower planner must not forget, however, that manpower planning is an integral part of all facets of the national development effort. In practice, manpower planning is a derivative function of development planning. The diagram below illustrates the sequence that decision-making should follow during the planning process.

O	S	R	agriculture	M
B	T	E	mining	A
J	R	S	transportation	N
E	A	O	communication	P
C	T	U	industry	O
T	E	R	other sectors of	W
I	G	C	the economy	E
V	Y	E		R
E		S		
S				

Planners first agree on the objectives they hope to fulfill with their plan. These objectives, whether specifically stated or generally assumed, influence the choice of strategy, since strategy is nothing more than the procedures which will be followed in reaching the objectives. The planner must then look at his country's resource stock to determine in what way these resources must be modified to reach the projected goals. Finally, the plan must be broken down by economic sector so that resources, both natural and human, may be allocated properly to attain the goals established by the strategy. Any manpower planning effort which fails to be integrated into the overall decision-making structure of the plan, in the manner indicated in the diagram, will be ineffective and incomplete.

THE NATURE OF NATIONAL DEVELOPMENT

Many elements must be combined to result in national development. Economic planning lies at the core of the development effort and is usually so taken for granted that we need not discuss it here. Education and health call for a major effort. Health is an area which has been receiving increasing attention since it has become known that nutritional deficiencies in early childhood may reduce a person's ability to learn. The development of science and technology is an especially important facet of total national development. In most developed countries scientists and technicians account for only about three percent of the population, but their work can be greatly assisted if supported by the understanding cooperation of the rest of the population. Developing countries must work to widen the base of support for their scientists and technicians.

One of the most neglected fields of national development is that of arts and culture. Some efforts in this direction often yield major results. The Caribbean region, for example, is an area which prior to independence had almost no indigenous culture. This region is characterized by a mingling of arts and customs of Africa and the East, with an overlay of Western culture. Since independence, however, the islands of the Caribbean have undergone a remarkable change. From their mingled cultures, a thriving, creative community of arts, crafts, and music has emerged, which is giving the region a sense of identity and common purpose.

People have been slow to grasp that politics and government administration are an essential element of national development. In most countries of Latin America and Africa, there are alienated minorities which consider the law their enemy. In order to achieve integrated national development, a country must have a structure of law which enables people to participate freely in government. Law should be creative and positive; it should not simply punish a thief but should encourage social and economic improvements which make it unnecessary for him to steal. The development of this kind of positive law may well become a major field of endeavor within the next decade.

National Development is a sum of many elements, none of which may be neglected. In many cases the most important method of attacking the problems which occur is to train people for special work. Thus, manpower planning may be conceived of as an essential element in nearly every phase of the national development process.

PROBLEMS INHERENT IN THE PROCESS OF PLANNING

No one has ever proved that planning is an essential and invariably good thing. Some countries have improved without resorting to a plan, and others have retrogressed in spite of having a plan. In many developing countries, however, a political party is considered derelict unless it proposes a development plan for the country. While it cannot be denied that a systematic survey of a country's resources and a time plan for the utilization of these resources are useful and important, the process of planning, and the discipline and ordered thinking this process engenders, are more valuable than the plan itself.

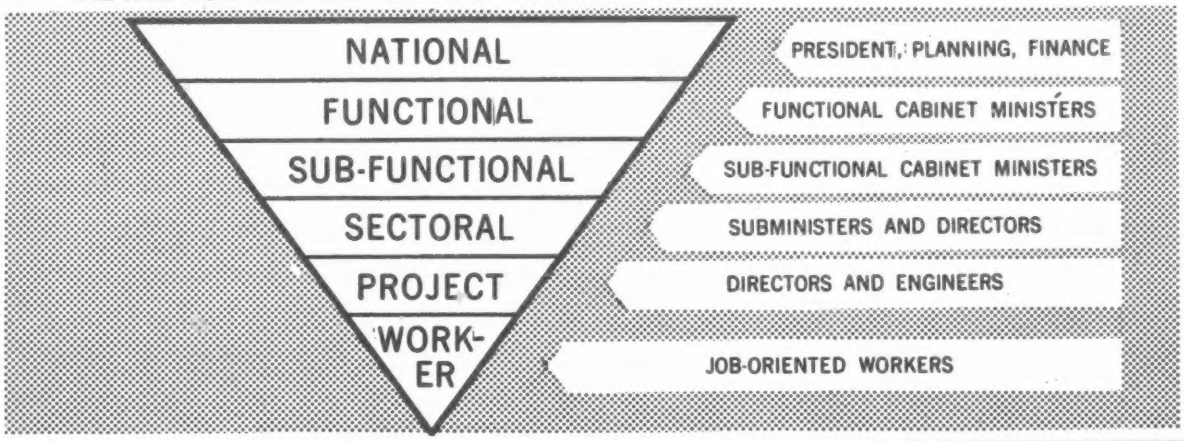
Although manpower is a nation's most important resource, it is also its most elusive and difficult to allocate. People have a way of acting illogically and thereby upsetting a carefully made plan. For example, a man trained for a middle-level job as a technician may decide, after completing his training, that he would prefer to continue his education rather than fill the job waiting for him. Population planning is an equally difficult matter since the final responsibility for family planning rests with the individual and not with any government ministry.

The time frame for a manpower plan is another problem inherent in the planning process. The fashionable length for a development plan is five or seven years, in spite of the fact that the development process is so long that five years represents only a small installment out of many years of effort. Within a five year period, for example, a university can make no meaningful contribution to development. We must learn to cast our plans in 20 or 30 year molds. Once we realize that our objectives are far down the road, we will not grow weary so fast while traveling towards them. Some statesmen in developing countries are unable to grasp the magnitude of the human resources problem. Often they equate the life of their country with their own lives, become nostalgic as they grow old in power, and form a pessimistic view of their country's future because they are discouraged about the progress they themselves have made. When India constructed three steel plants and asked a team of United States advisers to produce a schedule of manpower needs for those plants, we informed them that it takes only five years to build a steel plant, but 20 years to create a metallurgist. Just as a forester must not become impatient because a tree will not mature in less than 20 years, so the manpower planner must realize that his plans will not come to fruition quickly.

A third problem implicit in the planning process is the rivalry which develops among groups of people responsible for carrying out the plan. Each group has a different conception of the plan's significance, from the government ministers, who maintain a broad view of the needs of national development, to the individual worker who thinks of the plan in terms of the job it may offer him. The following graph illustrates the inverted pyramid of planning in which concern for overall developmental needs diminishes as the level of responsibility for the plan's administration decreases.

GRAPH 9

ADMINISTRATIVE RESPONSIBILITY IN MANPOWER PLANNING


NATIONAL
PRESIDENT, PLANNING, FINANCE
FUNCTIONAL
FUNCTIONAL CABINET MINISTERS
SUB-FUNCTIONAL
SUB-FUNCTIONAL CABINET MINISTERS
SECTORAL
SUBMINISTERS AND DIRECTORS
PROJECT
DIRECTORS AND ENGINEERS
WORKER
JOB-ORIENTED WORKERS

At the national level, the prime minister, finance minister, and plan administrator are concerned with the policy that shapes the plan and with priorities for development. One step down at the functional level, the ministers of education, agriculture, commerce, etc. compete among themselves for the allocation of the country's scarce resources to their area of responsibility.

The officials' concept of a development plan narrows even more at the subfunctional level, where agrarian reforms, educational reform, etc. are administered and still further at the sectoral level where major pieces of agrarian reform might be carried out. The administrator of a project such as a dam or school naturally considers his project very important, partially because his reputation depends on its success. Finally, the workers on a particular project will have yet another view of the development plan, since the successful completion of a project may mean the end of a good job. Thus, a development plan means drastically different things to different people. In Brazil, for example, the recent anti-inflation measures have been both strongly supported and attacked since their impact on different groups of people has varied so widely. Finally, the manpower planner must not fall into the trap of rationalization when making his plan. It is always his responsibility to consider what will happen and not only what ought to happen.

SIGNIFICANCE OF PLANNING AND ALTERNATIVE STRATEGIES

Morris A. Horowitz

THE IMPORTANCE OF INTEGRATING MANPOWER PLANNING WITH OTHER PLANNING

One may look at the significance of manpower planning from a number of different points of view. If full employment is the key goal of a society, then manpower planning becomes the single most important target of government action. A country with mass unemployment or underemployment is usually so deeply concerned about this problem that its development plan must emphasize measures that will provide a greater number of jobs. Other actions will become subsidiary to those necessary to attain the manpower goals. The definition of full employment must vary in each country, however. The English economist Sir William Beveridge described a society with full employment as one in which there are more jobs available than there are people looking for jobs. In this definition, however, only the overall numbers match; the job seekers and job vacancies do not necessarily mesh.

While many societies established a manpower goal as one of the important targets of their plans, it is generally not a key goal. A country's aims, more often, are "industrialization," "modernization," or "economic development." In the past, "economic development" has often been synonymous with "industrialization," although it is a great error for a country to forget about its agricultural sector. On the contrary, as Australia and New Zealand have shown, some countries could conceivably do more for their populations by concentrating on the mechanization of agriculture. No rule of planning says that a country should downgrade its agricultural sector in the process of industrialization.

When a country emphasizes economic development rather than employment, manpower planning becomes subsidiary to economic planning. Manpower planning may be an important constraint on economic planning, however. One cannot plan for economic development or industrialization without some knowledge about the supply of necessary manpower to build the plants and run the factories.

Because of the interrelationship between manpower planning and overall economic and social planning, it is very important that all planning should aim at producing one integrated plan. Manpower planning cannot be isolated. If a country suffers from a scarcity of certain kinds of skilled manpower, it cannot expand industries in which this manpower is needed. On the other hand, if a country's planners decide on cutbacks in one industry, a surplus of certain skills will appear. Such scarcity and surplus result when manpower planning and economic planning do not proceed at an equal pace.

The following factors must be taken into account in manpower planning:

1) Size and composition of the population and of the labor force, by age and sex;

2) labor force participation rate;

3) rates of growth of population and labor force;

4) educational and training programs and facilities, including the number of school teachers, and vocational training programs in schools or industry;

5) economic, social, and cultural incentive systems of the nation; and

6) rates of growth of the various economic sectors of the nation. The detail required will depend on the type and scope of the manpower program attempted.

Alternative Strategies in the Development and Utilization of Manpower

No single strategy can insure the success of a manpower plan. The choice of a strategy depends on the conditions and circumstances in each nation. One strategy is to adopt a policy of unrestricted immigration. The results to be expected from this approach are limited, however. Nations with a labor shortage cannot count on getting a sufficient quantity of the right kinds of skills, and those with a labor surplus will find it difficult to import outsiders while their own people are unemployed. Another strategy consists of concentrating on expanding high-level manpower. The proponents of this approach advocate heavy investment in higher education to produce an increased number of university-trained professionals. A third approach calls for emphasizing primary school education.

A major decision involved in determining the strategy for proper development and utilization of manpower is whether to concentrate scarce resources on developing the industrial or the agricultural sector. Political forces may influence a country's decision to concentrate on industry rather than agriculture, but these pressures are not at work in every country. Occasionally it may make much more economic sense to modernize agriculture than to attempt to expand industry.

Planning Versus Nonplanning

The focus of this lecture has been on manpower planning. We are now advising the developing countries of the world to plan their economies and their manpower. It is important to note, however, that a case can also be made for nonplanning. We have not proved conclusively that manpower planning and economic planning in general are crucial to rapid modernization and rapid industrialization.

While it is difficult to pinpoint a case where there is absolutely no planning, comparison can be made between the planned economies of Eastern Europe and the economies of Western Europe which have less planning or virtually no planning. These comparisons do not support the assertion that a high degree of planning is necessarily more successful than little or no planning. There are different kinds of economic planning. Some are more restrictive than others. Before adopting a form of economic planning, a country should consider how far it is willing to go in adjusting social and political goals to those of rapid economic development. If a country has a tradition of free enterprise and places great importance on maintaining individual liberties, a highly centralized planning structure may not be the answer to its problems.

HUMAN RESOURCES PLANNING

Máximo Halty Carrére

In this talk I would like to discuss two main topics--the concept of manpower planning and the Latin American "brain drain."

A CONCEPTUAL FRAMEWORK FOR HUMAN RESOURCES PLANNING

An analogy can be drawn between the proper management of capital resources for economic development and the management of human resources. With respect to capital resources, there are three stages in planning: 1) analysis and evaluation of existing capital resources, 2) mobilization and development of these resources, and 3) distribution and utilization. If we apply these same procedures to the planning of human resources, we evolve the following framework:

1) Diagnosis--manpower assessment studies of supply and demand in the labor market.

2) Development--development of human resources by means of formal education and vocational training, and the use of foreign human resources through immigration and technical assistance missions.

3) Distribution and utilization--wage policies and other incentives, development of institutions, planning employment prospects.

The success of these procedures requires both "horizontal" cooperation between those responsible for human resources planning, and "vertical" cooperation between the human resources planning offices and all offices responsible for carrying out other plans.

THE PROBLEM OF EMIGRATION

Latin American countries suffer greatly from the emigration of their most qualified manpower. Argentina, Uruguay, and Chile are the nations most affected by this problem. A recent Organization of American States study of a group of Chilean emigrants now in the United States, reported that only 35 percent gave higher salaries as the chief reason for emigration. Of the 65 percent who gave nonfinancial reasons, 30 percent said they sought a better professional climate, 16 percent hoped to improve their career status, 13 percent wanted better opportunities to do research, and the remainder emigrated because of better choice of jobs. Although these responses must be accepted with reservations, since it is always difficult to determine human motivations, we are forced to recognize that most of the Chileans interviewed had come to the United States because they were attracted by the wide range of opportunities, and not just by the lure of higher pay. Thus, a wage policy alone would not stem the present flood of emigration from Latin America.

Many Latin Americans probably would not emigrate if they found greater challenge in their native countries. Uruguay, a country which for many years progressed rapidly, is now stagnating in part because the country's leaders have stopped offering the people challenges to develop and improve themselves. The problem of lack of motivation is a qualitative one, difficult to define or to attack. There are Latin American countries which are endowed with resources but which lack the will to develop, and these countries have the worst emigration problems. Since it is not only difficult but unwise to prohibit emigration, measures to retain qualified manpower should be aimed at making it more attractive for them to stay home.

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Conference room scene during Seminar.

Assistant Secretary Weaver addressing the group on the War on Hunger.

B. THE STRATEGY OF PLANNING

INTRODUCTION

Approaches to human resources planning are many and they must, of necessity, vary from case to case depending on the particular social and economic circumstances prevailing in the country, the extent of national commitment to the planning concept, and the ground work, such as the gathering of adequate statistics that has been done for the planner in the past. Some of the general strategies that may be used as points of reference are outlined by speakers who discuss 1) the techniques of projecting manpower supply and requirements, 2) education and training to meet the needs of economic development, and 3) the effective distribution and utilization of manpower.

The speakers generally agree on the importance of setting goals and establishing target dates. Once general aims have been outlined, step by step procedures must be established to attain these ends. This cannot be attempted, however, without a thorough knowledge of the current situation, and therefore, considerable stress is placed on stock-taking. Here the manpower planner is often frustrated in developing countries by the lack of essential statistics.

The difficulties inherent in projecting manpower supply and manpower needs in countries which lack adequate statistics are mentioned by Mr. Kelley, who emphasizes the importance of structuring censuses with manpower requirements in mind. Mr. Kelley suggests three methods for projecting manpower needs-- 1) extrapolation from present patterns, 2) examining the experiences of other countries, and 3) the establishment survey in which employers are asked to project their manpower requirements. In her first lecture, Mrs. Sugg concentrates on techniques for forecasting manpower supply. She discusses the purpose and advantages of making projections, as well as some of the weaknesses. Mrs. Sugg considers three types of data essential before a forecast of the supply of manpower can be attempted. These are population projections, labor force participation rates, and statistics on the occupational distribution of the labor force. Techniques for forecasting manpower requirements are discussed in Mrs. Sugg's second lecture. A five step approach is recommended for this purpose. The first three steps involve 1) making a rough estimate of the future employment structure by economic activity, 2) analyzing anticipated changes for major industries in some detail by considering demand, hours worked, and productivity developments, and 3) refining the estimates made in step one on the basis of the findings in step two. In the fourth step, estimates of the occupational structure in the target year are attempted for each major industry, and in step five, manpower requirements determined in steps one to four are matched with the expected supply. The difference between the two gives the planner an estimate of training and educational needs. Mr. Horowitz describes his recently developed technique for using international statistics to project manpower requirements on the basis of output targets.

Throughout the discussion on manpower strategy, speakers repeatedly emphasize the important role played by the educational system. The close relationship that exists between manpower planning and educational planning is discussed in greater detail by Messrs. Harbison, Walsh, and Shearer. Mr. Harbison points to the interdependence of education and employment objectives and the need to make choices which may at times come down to efficiency versus equity. Human resources development planning should not be viewed as a predominantly quantitative process since no nation possesses sufficient resources to accomplish all of its objectives. There are competing alternatives, and these can best be worked out by means of a systems analysis approach. Mr. Walsh represents a comprehensive outline of the many aspects of a system designed for human resources development. He considers the instructor the key to success in achieving occupational competence of the labor force, but other important factors are the training plan, the instructional material, and the equipment and facilities used for training. Mr. Walsh stresses the importance of making use of all available facilities for human resources development--i.e. schools, private industry, public agencies, labor organizations, private trade and business associations, and the military. He concludes that on-the-job training may be the most suitable means for developing nations to obtain skilled manpower with the smallest possible expenditures. Mr. Shearer focuses on the problems of developing high-level human resources which play such a crucial part in the education and training of others and in economic and social development in general. He feels that the universities in developing countries have often been too slow in relating their programs to the needs of their respective nations. Not enough emphasis is placed on the sciences and agriculture or on developing administrators and managers. Mr. Shearer also discusses the impact of migration on the proper utilization of high-level human resources. Because of the lack of satisfactory employment opportunities, they tend to congregate in the largest cities or leave their home countries altogether and take up residence in the developed nations. Thus, the latter gain at the expense of the needy developing countries.

Effective utilization and distribution of human resources is the central theme of the four subsequent contributions. Mr. Harbison is of the opinion that in the pursuit of these goals, solutions to the problems attending a regional or national labor surplus are the most elusive. He discusses the causes of unemployment and underemployment, examines some of the solutions, and concludes that the soundest remedy is to keep people on the land. Mr. Horowitz defines the concept of labor force and proceeds to outline various ways in which the labor force can be manipulated. Mr. Kassalow explores the latter in greater detail by focusing on incentives that may be used to attract people to work in specific jobs or, possibly, in non-urban areas. He shows that wages in developing countries are often unrealistic and reflect tradition, race, religion, and politics, rather than the training investment for various types of workers. Many white-collar jobs, for example, require very little training but receive far better pay than highly skilled blue-collar work. Mr. Kassalow sees no solution to rural/urban wage differentials since there is no evidence from developed countries that wages in rural areas gain with respect to urban areas in the development process.

1. Projecting Manpower Supplies and Requirements

PLANNING TECHNIQUES AND LIMITATIONS

S. Clifford Kelley

The planning of human resources utilization involves an assessment of manpower requirements and an estimate of manpower supply. Different countries use different procedures for making these projections of demand and supply. No one method is absolutely preferable, and often the exercise of good judgment is more important than the details of procedure.

ASSESSMENT OF MANPOWER REQUIREMENTS

There are four main areas of consideration in the projection of future manpower needs. They are: 1) quantitative projection of the labor force and employment; 2) sectoral and occupational distribution of employment; 3) occupational qualification standards; and 4) patterns of skill utilization. The manpower planner must study these four factors while keeping in mind the country's general economic targets which are derived from its basic development needs.

Projection of Labor Force and Employment

The problem of projecting labor force trends is not a serious or complicated one in countries where an adequate, up-to-date census exists. In many developing countries, however, censuses are both antiquated and inadequate, excluding such information as rates of migration, mortality, and fertility.

Four factors affect the projection of future labor force participation rates in developing countries. First, an attempt to provide more and better education will probably lead to a reduction in the labor force as children stay in school instead of becoming economically active. Second, as welfare programs increase and improve, the participation of older people in the labor force will decrease. This factor is not likely to have an immediate impact because welfare programs do not tend to expand rapidly. Third, as economic development proceeds, the change of labor from agriculture to other sectors will lead to a reduction in the importance of unpaid family labor and to fewer women in the labor force. The reorganization of business resulting from the introduction of technological changes has the same effect. Fourth, the labor force reductions indicated above will be to some extent offset by an increase in the number of educated women who will engage in economic activities.

The planner who assesses manpower requirements must decide the extent to which the labor force will have to be unemployed or underemployed in the future. In general, developing countries have little data on unemployment and virtually no information or underemployment. As a result, there tends to be over-optimism among planners about future employment levels. In every country, however, the level of unemployment established as a national goal must be a level that is politically and psychologically tolerable.

The Sectoral and Occupational Distribution of Employment

The problem of projecting the distribution of employment among the sectors of an economy in order to achieve an output target may be dealt with by two methods. The more common procedure, called sequential allocation, distributes employment first by sector and then aggregates the sectors to get a national distribution of occupations. Another method, that of simultaneous allocation, involves use of a sector production function. On the basis of an output target, the planner applies the sector production function that will fulfill employment, productivity, and investment requirements.

Some planners allocate employment among the sectors using the goal of low unemployment as their most important criterion. Turkey, for example, has used its construction industry as the labor absorbing sector, while simultaneously emphasizing productivity gains and heavy capital investment in the manufacturing sector.

Three techniques aid in projecting the occupational distribution and impact of technology for each economic sector. The method of extrapolation from present patterns is widely used, although it is not very helpful in developing countries, where occupational structures are changing radically. There are two principal methods of extrapolation. One is to aggregate occupational distribution and project its rate of change over time. A second method is to select a key occupation, such as engineering, and project its future proportion of total employment.

Another technique is that of comparative occupational structures. It examines the experiences of other countries and relates occupational structure to production. If a country has production target "x" for a particular year, it may examine the experience of currently more developed countries at the time when their production was also "x". This procedure has two main disadvantages. First, the information base which allows us to make international comparisons is limited and is only gradually being expanded by research. Second, it is dangerous to acquire from another country a pattern of relationships determined by the peculiar situation in that country. We have no way of assessing the significance of differential uses of various skills or of different patterns of labor supply, yet these vary widely from country to country.

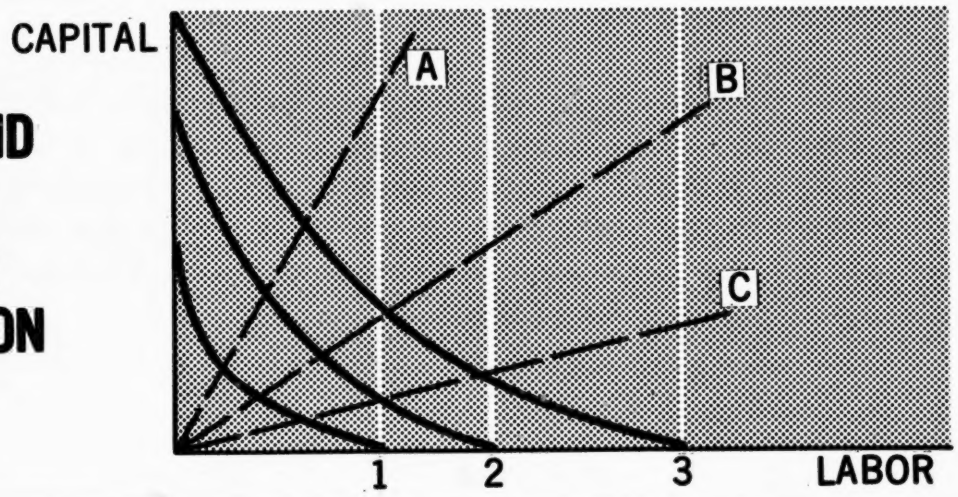
Establishment studies are a third method frequently used. They attempt to define the relationship between output, production, and occupational patterns. These studies fall into two categories. In the first type, a survey records an industry's assessment of its own present and future manpower requirements. Such a survey is helpful because most industries have skill deficiencies which they alone are aware of. However, the value of such surveys in projecting future manpower requirements is limited since few employers have a clear idea of what their manpower needs will be for more than a year in advance. Industrial surveys are most useful in helping to predict middle and lower level skill requirements but in general must be treated with reserve. Factor analysis constitutes a second type of establishment study. It involves research into the basic relationships between technology and the skill composition of the labor force. Although little work has been done in this area so far, the degree of approximation in our estimates of manpower requirements will be substantially reduced as research progresses.

These three techniques--extrapolation, comparative occupational structures, and establishment surveys--may be used in combination to determine a country's manpower needs. Such an experimental assessment is now being carried out in Ecuador, where surveys are providing a broad data base. First, an economic census to gather detailed data from all industrial establishments and aimed at improving input-output analysis is in progress. Second, a national manpower survey is being done on a sample of the country's establishments to determine the structure of employment and the extent of underutilization of equipment. In addition, groups of workers will be interviewed to determine their preparation, duties, and job histories. Third, a technological survey is attempting to classify manufacturing establishments in terms of the techniques used.

The analysis is derived from these sets of data can be illustrated by the following graph.

GRAPH 10

LABOR-AND CAPITAL-INTENSIVE PRODUCTION LEVELS



The analysts divide Ecuador's establishments into groups according to size and the proportions in which factors of production are used. Lines "A," "B," and "C" on the graph represent the capital-intensive, intermediate, and labor-intensive groups of establishments in Ecuador. The groups are also divided according to their levels of production. The curves (production contours) 1, 2, and 3, represent increasing levels of production. If we have a production target, we can then analyze the various ways of achieving it and define the implication of these methods for the proportion in which factors of production are used. The variable of labor in this graph can be weighted to reflect qualitative differences in labor such as differences in education and experience. It is extremely difficult, however, to decide on the best system of weighting.

Since all the data have not yet been accumulated, we can only guess what the conclusions of the Ecuadorian analysis will be. It is possible that the distribution of establishments will not be wide enough to suggest alternatives for change. The analysis may also suggest that short-, middle-, and long-term strategies be carried on simultaneously. For example, it may turn out that one can have a five/year target to reorganize small manufacturing establishments in order to increase efficiency and employment opportunities, and a 10 year plan to emphasize productivity gains and technological innovations in general. In any event, the Ecuador research illustrates the desirability to expand establishment studies to provide the extensive data base essential in making strategy decisions.

Occupational Qualification Standards

A third area to be considered in projecting manpower needs is that of classifying occupations on the basis of qualifications required. The usual method for doing this is to apply the International Standard Classification of Occupations (ISCO) of the ILO which indicates the skills required for specific jobs. Standard occupational systems are limited in that they must allow a great deal of heterogeneity in their nominal classifications. For example, the classification of "manager" obviously does not imply a unique complex of skills. Educational profiles of occupations have shown that educational requirements for identical occupations vary widely among countries. For example, it takes twice the number of hours to produce an engineer in Greece than in Yugoslavia. Planners should be more cognizant of these differences in qualifications.

Skill Utilization

If skill utilization patterns are not carefully projected, there is likely to be a serious waste of manpower and institutional resources. This problem of efficient skill deployment is especially serious in developing countries where educational resources are scarce. The fact that in many developing countries people are trained for jobs in which they will not find employment indicates that we have not put enough emphasis on the necessity of planning for utilization.

ASSESSMENT OF MANPOWER SUPPLY

In assessing a country's manpower supply we ask two main questions: 1) What is our present and future manpower supply? and 2) In what way can institutions influence the supply?

The immediate difficulty which arises when we try to answer the first question is a lack of demographic data. This lack results from the fact that in many developing countries censuses are not structured with manpower requirements in mind. There exists an international need to reprocess existing census data and to allow for manpower data when designing future censuses. A well designed census should supply us with information on a country's occupational characteristics, as well as statistics on mortality, retirement, migration, and other demographic characteristics.

Educational planners who are involved in assessing the capacity of a country's educational system to contribute to the development of human resources must look at the educational system as one of production. Planners must examine the system's efficiency in producing needed skills and must consider alternative ways of obtaining these skills.

FORECASTING MANPOWER SUPPLY

Matilda R. Sugg

WHY FORECAST?

The relevance and usefulness of making forecasts has frequently been questioned. It has been suggested, for instance, that one could rely on the judgment of businessmen or on the laws of supply and demand to achieve maximum use of a country's manpower resources. Thoughtful analysis of the manpower situation has borne fruit in the United States, however, and probably would in the case of Aurora. The main advantage of attempting to forecast is that it makes us look into the future more precisely and makes us focus on possible problem areas. For example, lack of high-level personnel will impede progress toward economic and social goals.

ASSUMPTIONS

When we divide time into past, present, and future, we find that we can say a great deal, with reasonable accuracy, about the past and present. Statements with respect to the future are very different. They are, by nature, speculative and based on judgments. For this reason, they are subject to all types of errors and should not be considered as statistical evidence. They are merely statements about the likelihood of specific events based on realistic assumptions made about the future. What are a few of these assumptions?

1) No major catastrophe will occur during the forecast period.

2) There will be a continuation of existing political and economic forces (no wars or depressions).

3) Scientific and technical progress will advance in line with recent experience.

BASIC STATISTICAL INFORMATION REQUIRED FOR FORECASTING

Manpower forecasting requires specific statistical information relating to the population and labor force, such as:

1) Rate of population growth.

2) Labor force participation rates by age and sex.

3) Distribution of employment by occupation and industry.

4) Size of the armed forces.

5) The level of unemployment and, if possible, identification of industries and occupations in which the unemployed have worked.

STEPS IN MAKING FORECASTS OF MANPOWER SUPPLY

1) Population projections by age and sex must be produced. This is the job of the statistician, and in the United States it is done in the Census Bureau. In making population projections, we must consider how many will be born and how many of those alive today will be alive in the target year. This depends on birth and death rates. As a result of improved health programs, death rates over the long run tend to decline. Birth rates, on the other hand, are subject to greater change than death rates. Although it is better to use your own statistics, the United Nations tables on death rates can be used as a substitute.

2) Labor force participation rates by age and sex must be computed. The labor force participation rate is a ratio of the number in the labor force to the population of that particular age and sex group. For example, to arrive at the labor force participation rate of males between the ages of 20 to 24, we take the number of males of that age group who are in the labor force and divide it by the number of males in the total population of that age group. In the male age group between 25 and 34 years old, the participation rate in the labor force is very high, perhaps between 95 percent and 97 percent. In the female group of the same age bracket, the rate is relatively low, but an increase has been noticeable in the United States. In 1947, the female participation rate was 32 percent, and 1965, 38.6 percent.

3) The potential supply of workers by occupation or occupational group must be estimated. To do this, we estimate the current pool of workers in each occupational category. From this base figure, we deduct estimated outflows (deaths, retirements, etc.) and add inflows. The result equals the potential supply of workers for each occupational group. Inflows to high-level and skilled occupations can be estimated by investigating plans for educational and training facilities and programs. I will have more to say on these supply projections later.

FORECASTING MANPOWER REQUIREMENTS

Matilda R. Sugg

Yesterday I outlined the steps in estimating manpower supply in the target year. Today I shall describe the steps in estimating manpower requirements.

There are several methods used in forecasting manpower requirements. The Bureau of Labor Statistics Report No. 248, The Forecasting of Manpower Requirements, describes one of these methods. A five-step summary of the method appears on page 11 of the English version. This summary is extremely simplified, omitting the complications which necessarily arise at every step, such as the lack of reliable statistics--a problem which plagues most developing countries. The most important statistical prerequisites of this method are reliable projections of both population and labor force for the target year. Once he has these two projections, a manpower planner can proceed, according to the method described here, to determine what the industrial and occupational breakdown of the labor force will be.

SUMMARY OF THE STEPS

In step one of this five part approach, the manpower planner starts by using the projected labor force supply data for the target year to derive a rough first approximation of the future employment structure by economic activity. This approximation is very difficult to make. In the United States we depend heavily on past statistics to project future trends in the industrial distribution of the labor force. Where past statistics are missing, we begin with whatever information we have on the current situation.

As we have seen in step one, the planner derives his approximation of the structure of future employment in each industry without referring to changes in production. In step two, on the other hand, he makes a second estimate of future employment by taking into consideration anticipated changes in demand for each important industry's products or services and anticipated changes in hours worked and productivity. If, for example, we are projecting the structure of employment in the automobile industry, we first ask what the demand for automobiles will be in the target year. This anticipated demand is usually expressed in units of the product, but in a multi-product industry, such as the apparel industry, it is expressed in the dollar value of the product. An increase in demand may be generated by a population increase, by a change in the age distribution of the population, and by economic growth of the country as a whole. Once we have obtained an estimate of future demand, we must determine how many people working a certain number of hours per week at a certain output per man-hour will be needed to produce this product. In step two, therefore, the planner relates the structure of employment to demand, productivity, and hours worked, in each industry.

The estimates arrived at in steps one and two are compared in step three, and any conflicts between their projections are reconciled. As a result of these first three steps, the planner has a complete model of employment by industry in the target year. He must then consider what occupations will be required in those industries.

In step four, the planner takes the best available information on occupational composition patterns for the base year of his plan, makes modifications of these patterns taking into account the anticipated changes in technology, and comes out with an occupational structure required by each major industry for the target year. In making this estimate, the manpower planner is particularly interested in determining the future requirements for individual high-level and skilled occupations.

Step five involves matching manpower requirements for the target year, which have been determined by steps one through four, with the expected supply of qualified workers under existing training arrangements and facilities. Demand for high-level and skilled workers is usually greater than the supply. The difference between the two gives the planner an estimate of the magnitude of the training and educational needs.

This five step method, like all methods for projecting manpower needs, is not at all precise. It can indicate the direction which manpower policy should take, but it can tell us little about the exact number of workers who will be needed or available in a particular occupation in the target year. Even though the recommendations which result from its use are not numerically precise, this five step method is much more complex and comprehensive than a simple summary would indicate. It is necessary to examine each of the five steps in greater detail to appreciate their value.

STEP ONE

As has been indicated, we begin with the single figure of the total anticipated labor force not broken down by either sex or age. From this number we subtract those workers who are expected to be in the armed forces in the target year, a number which depends on the country's military policy. We have assumed there would be no war. The anticipated number of unemployed persons in the target year is also subtracted from the total labor force. There are two ways of determining the future unemployment rate: First, the planner may assume the same rate of unemployment in the target year as exists in the base year. Second, if the manpower plan stipulates full employment as one of its goals, the planner assumes a rate of unemployment for the target year which is compatible with the full employment goal. In the United States, for example, we assume that, because of the mobility of our labor force, a frictional unemployment rate of three percent in 1970 is compatible with our stated aim of full employment. When the anticipated unemployment and armed forces are subtracted from the total labor force, the number which remains is the estimated number of employed persons for the target year.

In step one the planner must also estimate which industries are expanding and which are declining and what effect these changes will have on employment. Some industries decline even in a growing economy; their importance relative to total production may decline even if their production in absolute figures does not go down. Historical statistics give the planner some idea of the trends in various industries but are of little help in determining whether present trends will continue or accelerate. The planner combines his knowledge of industries with a knowledge of the investment policies of his country's development plan to determine to what extent a decline in job opportunities in one industry will be balanced by the creation of job opportunities in another industry.

STEP TWO

The purpose of the more detailed analysis employed in step two is to discover whether the approximation of future employment by economic activity, arrived at in step one, is reasonable. Therefore, step two needs to be independent of step one.

After determining the change in demand and production of each industry between the base and target years, the manpower planner estimates what implications this production figure will have for employment. To do this, he must make some projections of productivity; in other words, he must know whether a man will produce the same number of items in the same length of time in the target year as he produces in the base year.

Another factor which enters into the computations of step two is the length of the workweek. Since the usual way of estimating productivity is by determining the output per man-hour in an industry, an assumption must be made about the number of hours a man will work during the target year. If the planner assumes a shorter workweek and longer vacations with pay for the target year, and, at the same time, plans for expanded production, the productivity or the labor force must necessarily increase.

STEP THREE

In the third stage of this method of forecasting, the planner compares the approximations arrived at in steps one and two and reconciles all differences which appear between the two. He keeps in mind that all projections must be consistent with the basic projected increase in the labor force. Step one, therefore, acts as a curb to step two, keeping estimates of future employment within a reasonable and realistic limit.

STEP FOUR

Making the occupational breakdown called for in step four is a very difficult process. Ideally, a planner has access to information about the percent distribution of employed persons by occupation in the major industries for the base year, and these help him predict the required occupational distribution for the target year. The planner decides, on the basis of his information about his country and his knowledge of his country's development plan, whether occupational structures will change substantially between the base and target years. An important factor influencing this judgment is the development plan's emphasis with respect to technology. If the plan advocates labor-intensive technology for one industry and capital-intensive technology for another, this fact will strongly influence occupational patterns.

Mr. Morris Horowitz of Northeastern University has studied the changes in occupational structure which occur at different stages of development. His findings are extremely valuable for planners in developing nations who wish to make projections of occupational distribution.

STEP FIVE

A comparison of anticipated industry needs with projected supply shows potential areas of shortages or surpluses. To estimate the number of teachers who will be available in the target year, we take the number of teachers available today as the departure point, subtract those who will be lost between now and the target year through retirement, death, promotions, and job changes, and add the number who will have entered the occupation during the forecast period.

The process of estimating the number of people who will enter a skilled occupation is complicated by the fact that there is seldom a one-to-one relationship between the number of graduates of an institute which teaches a particular skill or profession and the number of people who enter that occupation or profession. Although some occupations, such as the medical profession, have strict formal educational requirements, for most occupations, including high-level administrative jobs, there is no direct relationship between education and occupation. An engineer may enter his occupation by going to engineering school and earning a degree, but he may also combine a few years of engineering school with a few years of on-the-job training and perform the same functions as a man with a degree.

MANPOWER POLICY, PLANNING, AND STRATEGY

Morris A. Horowitz

THE MEANING OF MANPOWER POLICY

Even in the more industrialized countries of the world, the idea of developing a manpower policy is relatively new. Only since the worldwide depression of the 1930's has the desirability of what currently is referred to as a national manpower policy been recognized. Before that, the problems of employment, underemployment, and productivity were left to free market forces. People were socially concerned, but a comprehensive policy was usually lacking.

By the phrase "manpower policy" we generally mean an outline of a series of steps and procedures whereby affirmative action can be taken to adjust or manipulate the labor market. It is most common for a manpower policy to be adopted by a government, but it is not the exclusive jurisdiction of governments. Private enterprise may also formulate manpower policies for its own or society's interests. Trade unions may become involved in adopting various manpower policies in order to manipulate or regulate forces in the labor market.

Setting Goals and Targets

Manpower policy means not only that an affirmative policy is necessary, but also that this action must be geared to a specific goal or target. What these goals should be is the topic of much debate. A government may adopt a manpower policy with the goal of obtaining an unemployment rate as low as five percent over the next 10 years. A manpower policy adopted by a private enterprise may have as its goal on-the-job training of 200 tool and die-makers over the next 10 years. A trade union may adopt a manpower policy that is geared to the full employment of its membership. To attain this goal the union may attempt to restrict entry into the specific craft, while encouraging an increase in manpower requirements for that craft.

A government may set a goal of full employment, but the exact meaning of full employment has never ~~been~~ clear. We were very concerned about this issue in the United States after World War II. In the 1930's, at the depth of the depression, we had an unemployment rate of 25 to 30 percent. The figure is vague because we did not have, at that time, the extensive manpower statistics we have at present. By 1941, we still had around nine or 10 percent unemployment, a significant number.

New Deal programs made some progress but failed to solve the unemployment problem completely. Then the war came. By 1944, we had less than two percent unemployed, probably the lowest possible level, since there are always a certain number of people in the process of changing jobs. When the war ended in 1945, people began to worry about what would happen in the transition period. Many economists predicted a depression, but it did not materialize. In 1946 the Employment Act was passed. As a result, it became the stated goal of our economy to attain the highest level of employment consistent with stable prices and high production. This is still our policy.

Private enterprise also has set goals by industry or by individual company. The goals of these different manpower policies may harmonize or conflict with each other. There is no assurance that the manpower policies of the different sectors of the economy will be geared to the welfare of the whole society. In fact, conflict in goals is more likely than harmony, especially in the case of unions and the business community.

Another aspect of manpower policy is that whatever affirmative action is called for must be based upon knowledge of the labor market. Once you have developed a policy, you have to plan step-by-step procedures to attain the stated goals. A meaningful manpower policy must be based on a rather complete understanding of the components of national labor markets. Knowledge of the current situation is an obvious prerequisite to any action which attempts to adjust, regulate, or manipulate labor markets via manpower policy. Manpower planning is a dynamic process, so we must always be aware that the current situation lasts only for a short time. You need fairly regular surveys to keep up with the current situation.

MANPOWER PLANNING AND STRATEGY

Manpower planning involves looking into the future and deciding the actions needed over a period of time to attain a specific goal. In doing so, one should always bear in mind that manpower planning does not and cannot involve programs in a vacuum. Other planning, other actions, other goals are also being considered and adopted by a society. Economic plans, social plans, or welfare targets make demands on the financial resources and political support of a nation and may conflict with manpower planning. Social goals, especially, may receive priority. Harmony of plans, actions, and targets should be the goal of any planning unit.

MANPOWER REQUIREMENTS

One of the first steps of the manpower planning process is the establishment of goals. Generally, these goals are cast in the framework of employment levels by industrial sector and by occupation or occupational group. Determining the manpower requirements of a nation as of a specific target date is one of the more difficult aspects of manpower planning. Various techniques can be used to estimate manpower requirements of the different sectors of the economy. Clearly, some methods are more reliable than others. Some are purely statistical in nature and require no more than knowledge of trends. Others require a great deal of judgment and sophistication.

One of the weaknesses of the international comparison method of projecting manpower requirements has been the lack of international statistics. In 1960, for example, Puerto Rico had to use the United States census of 1950 as a basis for projections to 1970. Even though the Puerto Rican projections have worked out well over the years, we still feel that the gap in international data must be filled.

Let me describe a technique that my colleagues and I are developing at the present time. We have assumed that there is a relationship between levels of technology and productivity. We collected manpower statistics for 19 countries on employment by occupation, cross-classified by industry. For seven of the 19 countries we were able to get data for two different years. Most of the countries used some variation of the international classification system such as the International Standard Classification of Occupations (ISCO) and the International Standard Industrial Classification (ISIC). We resolved the conflicts in definitions and classifications, by developing our own system of occupational and industrial classification, using 200 occupations, cross-classified by 50 industries. For each of the 50 industries, we ranked the countries by productivity, defined as value added per employee. We then showed the percent distribution of employment by occupation in each industry. Supplementary tables detailed the educational attainment of those employed in an industry by occupation. A developing country can use these tables to ascertain the occupational structure of a country whose productivity it would like to attain. The data should not be interpreted as providing clues for projecting manpower requirements on the basis of an output target.

MANPOWER SUPPLY

Of nearly equal importance is determining the manpower supply as of the target date. Here again various methods are available, some of which are better than others. The age and sex distribution of the population and the age, sex, and participation rates of the labor force are crucial pieces of knowledge about potential manpower supply. In addition, one must have specific knowledge about the educational and training facilities of the nation and their potential capacity for producing the necessary manpower with the required training and skill.

MATCHING SUPPLY WITH REQUIREMENTS

One of the final steps in manpower planning is determining the policies that will equate the manpower supply with the manpower requirements as of a specific target date. It may be necessary to adopt policies that adjust or manipulate participation in the labor force. This may be done by raising the retirement age or by permitting earlier labor force participation. Other methods are increasing or decreasing the amount of education or training in some of the needed occupations or adjusting immigration policies in order to augment the supply of needed professional or skilled personnel. The use of technical consultants may be another way in which manpower supply may be adjusted to meet requirements. The planner should always consider the possibility of adjusting the real world to fit the plan's requirements. It is wrong to assume, however, that a country can adjust large differences between supply and demand for manpower through outsiders. Politically and socially, it is a gross error to import a large percentage of manpower needs, especially if there is significant unemployment or underemployment among the native people. Whenever possible, the native workforce should be utilized.

2. Education and Training to Meet the Needs of Economic Development

A SYSTEMS ANALYSIS APPROACH TO HUMAN RESOURCES DEVELOPMENT PLANNING

Frederick H. Harbison

THE IMPORTANCE OF BALANCING EDUCATION AND EMPLOYMENT OPPORTUNITIES

Man in his natural state is underdeveloped. Because education, training, and experience can increase his capacity for productive work, human capital formation is essential for a development program. Indeed, the wealth of a nation does not depend on physical capital but rather on the capabilities of its people to make the most of what is available.

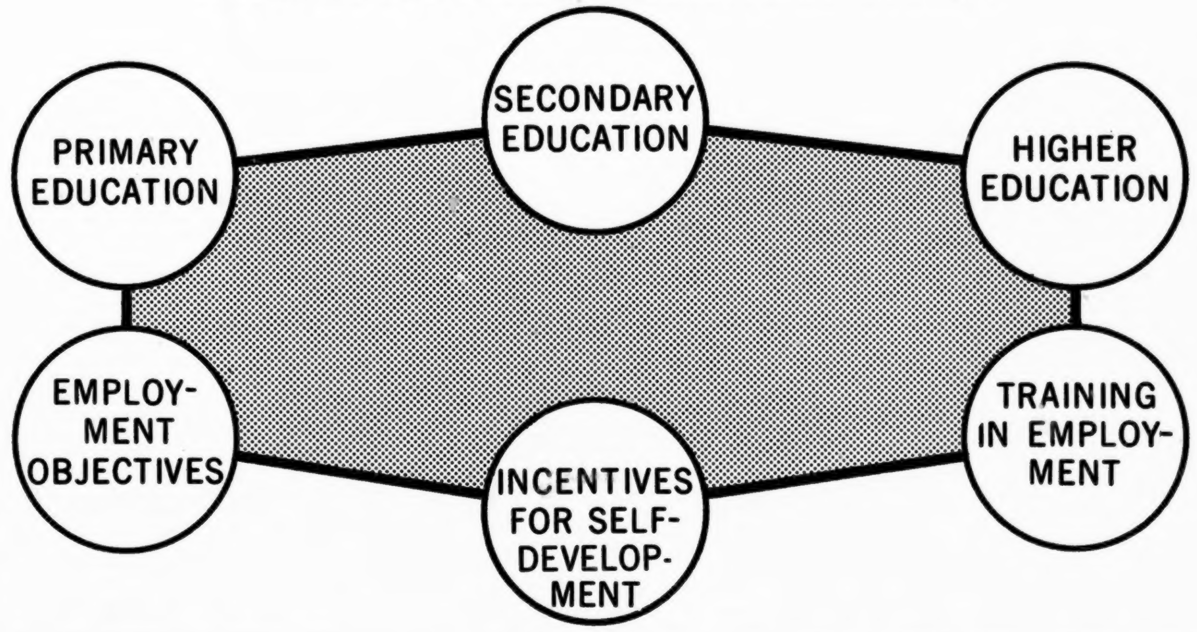
A serious problem faced in development planning is that everyone wants an education at all levels. The educational structure tends to upgrade itself. For instance, when a system of universal primary education is established, it requires the training of teachers who must have at least a secondary education. Educational planners argue for more education at all levels simultaneously. Since no country possesses sufficient resources to accomplish all these objectives, choices must be made and a broad strategy of effective development and utilization of human resources formulated.

Such a system is analogous to a system for electric power generation and transmission. Excessive voltage can blow out the rest of the system, and faulty transmission can result in power losses. All elements of the electrical system must be balanced, therefore, otherwise a weakness in one element may impair or destroy the entire system. Similarly, the intellectual power generated in primary, secondary, and higher educational levels is wasted unless it is linked into a system of training in employment, incentives for self-development, and employment objectives. About one-half of man's capacity for growth is growth on the job. Therefore, if large numbers of high-level personnel are generated by an educational system, without taking into account their immediate utilization through on-the-job training, then an organizational power failure is sure to result.

Just as the educational system should be geared to appropriate employment incentives, so too should wage incentives reflect the manpower needs of a country. For example, most societies require a ratio of three technicians for every university graduate, but current wage incentive systems in developing countries encourage a 1:1 ratio. In Africa the inherited colonial wage structure has resulted in an overemphasis on generating high-level human resources. It results in the inevitable emigration of such people because of inadequate employment opportunities. Specifically, Africa has too many administrators and engineers, and not enough technicians. Another example of underutilization is that developing countries badly need scientists, but nowhere are scientists unhappier than in developing countries where supporting facilities and institutions are lacking. Producing high-level human resources is a relatively simple matter, but it is in balancing university education with effective utilization that the solution to manpower training must be sought. The extent of the "brain drain" in any country varies directly with its capacity to utilize its highly trained scientific and technical personnel. This should be of fundamental concern in establishing high-level human resource development plans. Studies undertaken by the OAS, in which I participated, show the need for scientific research in developing countries, especially on agriculture; university curricula; efficient, yet labor-intensive industrial techniques; and community development. However, in developing countries the trend has been for persons who have the training to do such work to emigrate to Europe or the United States.

A sound systems analysis approach, where factors are not considered in isolation but rather in relation to the whole, will reveal weaknesses which impair the operation of the entire system and will insure a balance. This is a job for the overall integrator rather than the quantitative estimator, and one in which qualitative considerations are as important as quantitative techniques. The balanced human resources development system can be portrayed in the following way:

GRAPH 11 A HUMAN RESOURCES DEVELOPMENT SYSTEM



IMBALANCE IN EDUCATIONAL SYSTEMS

Several illustrations of imbalance in human resources development will serve to highlight the deficiencies in the educational systems of developing countries. In Nigeria there are five good universities which produce high calibre graduates. The cost of this education, however, is one of the highest in the world, and at $3,000 per year per student (versus $2,000 per year per student in the United States) represents 50 times the national per capita income (versus an amount equal to the national per capita income in the United States). Thus, in Nigeria, the proportion of resources invested in educating a relatively small number of people is staggering.

Moreover, there is continuous pressure on secondary schools to generate qualified graduates, and, whereas only .1 percent goes on to a university education, everyone is inculcated with this goal This factor results in a general warping of the human resources development system, and widespread career frustrations. In the meantime, shortage occupations go begging for skilled workers and technicians due to pay differentials and status considerations.

For a greater degree of balance in Nigeria, what is needed is a multi-track secondary education system geared not so much to university preparation as to broad career development objectives. In addition, wages should not be based exclusively on possession of a university degree but rather on contribution to national productivity. In many cases such a policy would result in people with middle-level educations being paid as much as university graduates. It is better to have skilled medical technicians willing to go into the bush, than to have fully qualified doctors living in luxury in the city and benefiting a few expatriates.

As to the inherited civil service system, I propose a radical solution. Wherever possible the university degree as a job qualification should be abolished; entry should instead be based on performance exams. This would tend to open up administrative positions to those people best qualified and would avoid the pitfall of using the degree as a union card for closed shop hiring practices. In the United States, for example, 25 percent of the engineers and five percent of the scientists have no university or college degrees, and their positions can be traced to a process of job upgrading in an environment where ability and competence are stressed.

Another example of imbalance is the frequent overemphasis on vocational training in formal institutions. This is wasteful because on-the-job training provides the same kind of training in less time, and because in these occupations experience is far more significant than theoretical knowledge. Furthermore, the training provided by vocational schools is often not used. In Ghana, for example, 90 percent of the graduates of vocational schools become government clerks, qualifying for such jobs on the basis of the literary component of their craft training. This practice constitutes a terrible waste, especially since vocational education is three times as costly as general education.

SOME STRATEGIES FOR ACHIEVING BALANCE

One way to correct this situation would be for the state to provide general education at the secondary level, with additional training furnished on the job by employers. In cases where there are foreign enterprises operating in a developing country, it would appear entirely reasonable to shift the burden of training to those firms, since they are usually better equipped to provide it. With reference to small indigenous enterprises, the National Training Agencies of Latin America have demonstrated that these employing institutions can make significant contributions through taxes earmarked for centralized vocational training.

Several countries have adopted the policy of providing university educations according to a quota system of specialization. For example, 40 percent of the graduates must be trained as lawyers, 50 percent as engineers, and 10 percent as educators. The difficulty with this approach is in a) producing the wrong kinds of engineers or other specialists and b) producing them at the wrong time, when institutions are not yet hiring despite genuine national needs for such graduates. Here again, it would be far better to take the systems analysis approach, where decisions taken at one point in the system are weighed against the contribution to the system as a whole, and the final result is one of balance.

A crucial question in high-level human resource development is whether to require graduates returning from foreign universities to satisfy specific manpower needs of their mother country or to allow them freedom of choice in taking up professions at home. If it is left to the individual to decide, he may, in fact, never return Yet, should members of democratic societies be required to enter assigned employment fields involuntarily? This is indeed a difficult matter to resolve. However, developing countries can do a good deal more in providing employment opportunities for their returning graduates and thereby relieve critical manpower shortages. At the very least, accurate records should be kept of all students studying abroad, so that jobs can be planned for them at least one year prior to their return. But most countries have no centralized institution to match skills and available jobs, and the characteristic employment tangles that develop are but a further example of organizational power failure.

As regards primary education, the choice must be made of either offering universal mass education at first and second grade levels, with high attrition rates from the sixth grade on, or providing education for a smaller base with better assurance of follow-through to higher education. It should be noted that it requires a minimum of three years to acquire a basis for learning, and that the first two years of primary schooling are, in this sense, largely without educational value. Therefore, such a decision is based on efficiency versus equity. An example of the hard reality embodied in this decision was Eastern Nigeria which became the victim of its policy of free universal primary education. The Eastern Region was nearly bankrupted by the response to that policy, in which an enrollment level of 80 percent of the eligible children was achieved, and fees to offset tuition expenses had to be levied.

It may be that a developing country's manpower needs would be best served by an educational system which provides free education at the lower primary levels and charges fees at the higher levels. In Latin America, on the other hand, fees are charged at the secondary school level, while university education is provided free of charge.

To summarize, the central point I am trying to make is that the art of human resource development planning requires integrative judgment and careful analysis (including cost-benefit analysis) of competing alternatives. It is not merely a quantitative process but a total strategy-building approach.

HUMAN RESOURCES DEVELOPMENT: SYSTEMS AND PROGRAMS

John P. Walsh

ESTABLISHING A FRAMEWORK

An analysis of systems of human resources development should take place within a general framework. Before we can establish such a framework, however, we must assume the existence of the following types of information:

1) An Economic Development Plan--Such a plan would give purpose and direction to the analysis by defining the social, political, and economic goals of the society in question.

2) Industry-Occupation Projections--As development takes place there will be shifts in industrial emphasis. There will be new jobs and changes in the techniques used to do traditional tasks. The manpower analyst needs to know the long-range effects of these developments.

3) A Manpower Requirements Analysis--If the goals established in the economic development plan are to be met, a study will have to be made of the number and kinds of workers needed for this purpose.

4) A Manpower Supply Analysis--This involves a survey of the numbers and kinds of persons currently available for work.

5) An Education and Training Resources Study--Such a survey should show the educational and training facilities currently in existence and their potential for providing the necessary human resources. Expansion possibilities should be analyzed in relation to future requirements.

6) Manpower Development Goals--Finally, there should be a timetable for achieving specific goals with respect to manpower planning.

DEVELOPING OCCUPATIONAL COMPETENCE

The following are of prime importance for developing occupational competence of individual workers:

1) Instructor

2) Training plan

3) Instructional material

4) Equipment

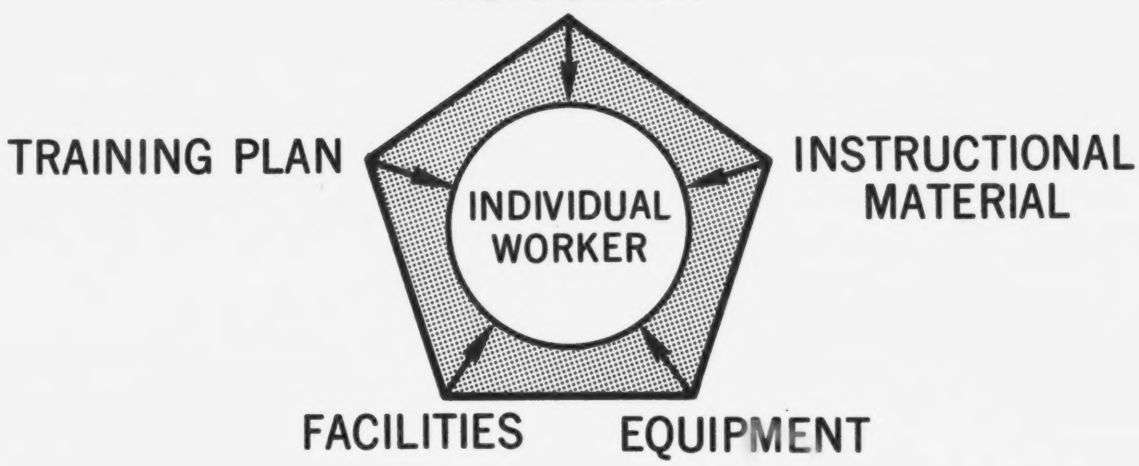
5) Facilities

The relative importance of each of the above will depend on the skill to be taught. In determining the proper "mix" for each occupation's training program, the manpower administrator must never lose sight of the fact that the individual worker is at the core of his efforts. In all cases, however, the instructor will be the key to success. If he is inadequate, the other factors will be irrelevant.

The following graph illustrates the various aspects of the development of occupational competence.

GRAPH 12

DEVELOPING OCCUPATIONAL COMPETENCE



DEVELOPING INSTRUCTORS

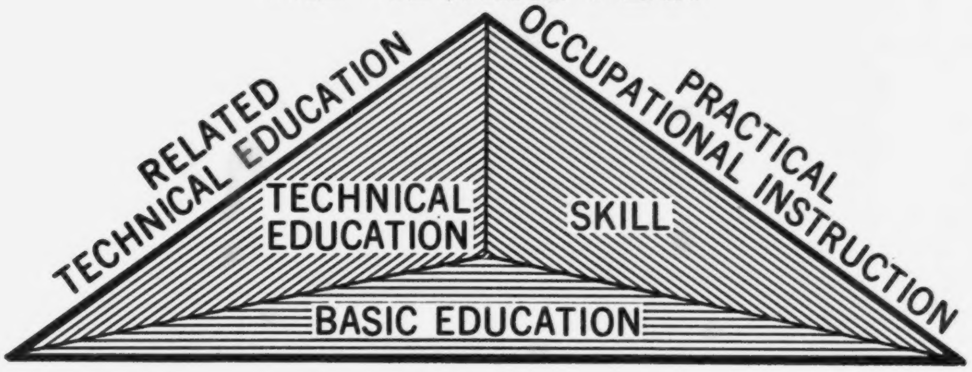
A successful instructor has three main qualifications. The first is the ability to communicate. A basic general education is a requisite for this skill. Second, he must have adequate skill and preparation in the field he is going to teach. Third, he should have proper instructor training. It is not enough for him to know what to teach--he must also know how to teach.

THE TRAINING PLAN

A well-developed training plan consists of three elements: I) a formal educational system which provides sound basic education, 2) related technical education, and 3) practical occupational instruction. The importance of each of these elements in relation to the others depends on the specific occupation in question. Some occupations may require more basic and less technical education; for others the opposite is true. The following diagram illustrates the elements of a training plan.

GRAPH 13

THE TRAINING PLAN

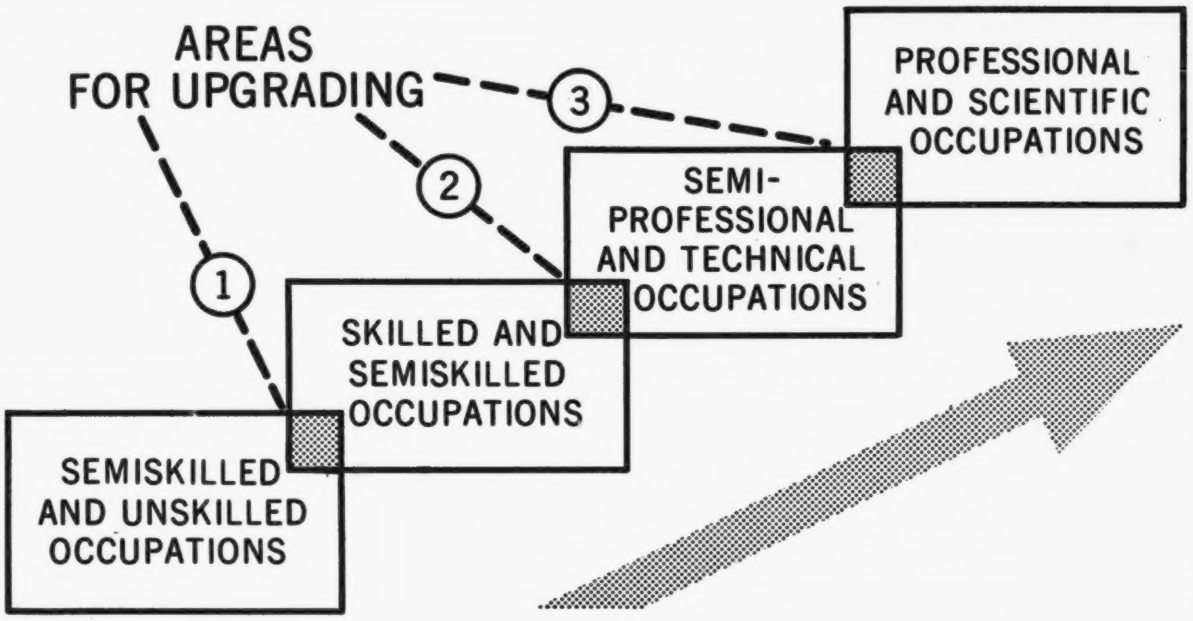

RELATED TECHNICAL EDUCATION
OCCUPATIONAL PRACTICAL INSTRUCTION
TECHNICAL EDUCATION
SKILL
BASIC EDUCATION

JOB LEVELS AND TRAINING REQUIREMENTS

The job level to which a worker can aspire is determined by the education and training he has received. It would be wrong to assume, however, that initial preparation or the absence of it permanently determines his occupational status. Provisions must be made for continual training and retraining as advancing technology makes learning new skills imperative. In addition, everyone should be given the opportunity to move up the skill ladder, as presented in the following graph. In order to have the occupational mobility shown here, facilities must be available for upgrading skills by means of additional training or education.

GRAPH 14

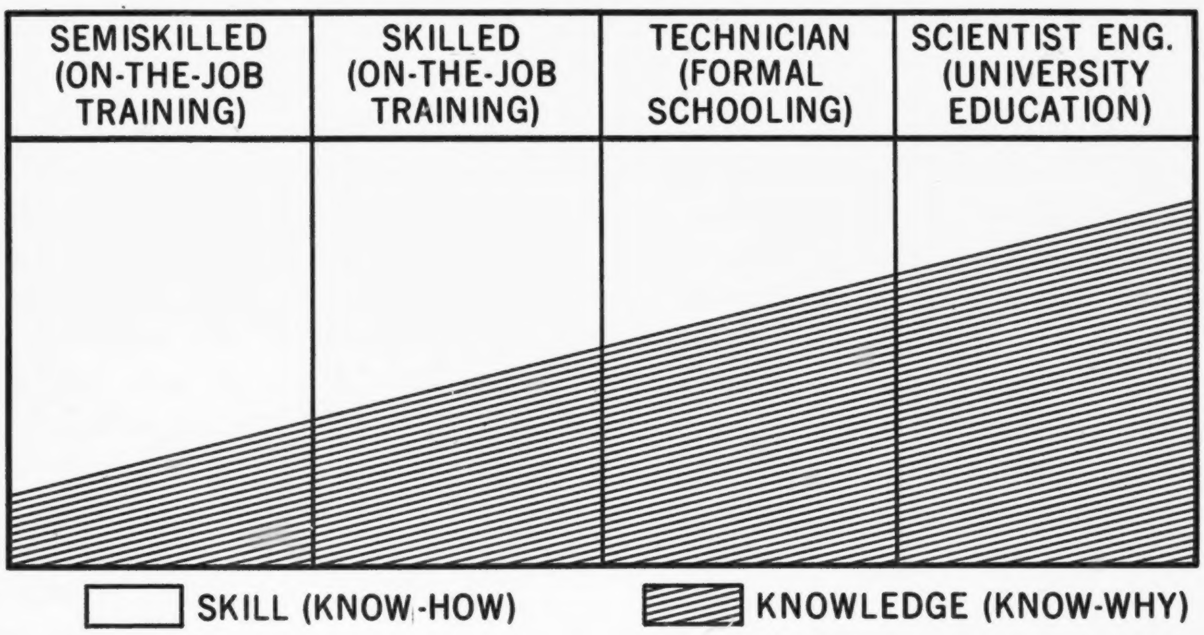
OPPORTUNITIES FOR SKILL UPGRADING


AREAS
FOR UPGRADING
③
②
①
PROFESSIONAL AND SCIENTIFIC OCCUPATIONS
SEMI-PROFESSIONAL AND TECHNICAL OCCUPATIONS
SKILLED AND SEMISKILLED OCCUPATIONS
SEMISKILLED AND UNSKILLED OCCUPATIONS

JOB LEVELS AND COMPETENCE REQUIREMENTS

GRAPH 15

COMPETENCE REQUIREMENTS FOR VARIOUS JOB LEVELS



At the lower job levels, skill and "know-how" are the most important requirements, while at the higher levels, knowledge and "know-why" assume more importance. For example, an engineer must generate ideas to be carried out by others. Therefore, his training must differ from that of semiskilled workers. Graph No. 15 presents a rough picture of the differing skill and knowledge compositions in four types of jobs. For the first two groups it is more important to "know how," while for the last two, it is crucial to "know why."

DECISIONS TO BE MADE IN MANPOWER PLANNING

Emerging nations are faced, therefore, with the need to make the following specific decisions regarding training:

1) What to train for?

2) What financial resources are available to do the job?

3) Who should be trained?

4) Where will the training take place?

5) Who will do the training?

6) What is the training plan?

7) What training facilities are needed?

8) What equipment and training materials are needed, and where are they?

These are difficult questions, but in some cases the experiences of other nations may be relevant. In any event, planners must assume that these questions can be answered. An overall evaluation of the resources available should be made before final answers to the questions posed are attempted.

TRAINING FACILITIES

Facilities for human resources development are provided by 1) private industry, 2) public and private schools, 3) public agencies, 4) labor organizations, 5) private trade and business associations, and 6) the military establishment. Private industry has on-the-job training, apprenticeship, and formal training courses. Public and private schools have formal courses. Public agencies provide on-the-job training, formal training programs, and special evening classes. Private trade and business associations also offer courses. The military establishment has formal, on-the-job, and apprenticeship training programs which are among the finest to be found anywhere. Moreover, these are designed to teach equipment operation as well as maintenance. It is often helpful to integrate some of the existing programs with those designed for a precise human resources development need.

TRAINING SYSTEMS

The manpower expert must distinguish between the public and the private sectors in dealing with training systems. In the public sector programs may be carried out by: l) a national training agency, 2) a national ministry of education, 3) a department of labor, and 4) other national government agencies. Every developing nation must first decide whether it wishes to establish a national training agency. In several developing nations in South America, national training agencies have proved quite successful. Once established, a national training agency decides what to train for and how the training programs should be implemented. Such an agency should coordinate its programs as much as possible with programs available in private industry.

In some countries the national ministry of education is in charge of training systems, and the ministry of labor is responsible for providing vocational training for workers. In the United States, the Department of Health, Education and Welfare is charged with vocational and technical training. Federal spending in this area grew from $9 million in 1917 to $55 million in 1946, and now stands at $225 million. The U.S. Labor Department is responsible for training the out-of-school population and, under the Manpower Development and Training Act, is authorized to spend one-half billion dollars on manpower development in 1966.

There are four main types of training systems in the private sector: l) company systems, 2) trade union systems, 3) private schools, and 4) correspondence schools. Company and trade union systems may provide formal training courses, on-the-job training, and apprenticeship. Private schools have formal courses. Correspondence schools provide formal courses which usually may be completed through study after working hours. Both the public and the private sector, therefore, provide a number of systems which should be harmonized to achieve the most favorable balance for all segments of the work force.

TYPES OF TRAINING PROGRAMS

The two types of training programs are action programs and support programs. Examples of action programs are l) vocational schools, 2) on-the-job training, 3) cooperative school industry education, 4) industrial apprenticeship, and 5) industrial upgrading courses. To be fully operative, these must be based on the five support programs: 1) instructor training, 2) coordinator training, 3) instructional materials development, 4) occupational analysis activity, and 5) recruitment, selection, and referral activities.

CONCLUSION

Developing countries will probably find it most satisfactory to emphasize on-the-job training. Such training will provide skilled manpower with the smallest possible expenditure of valuable financial resources. Particular attention should be given to the proper coordination of various programs for human resource development. Through proper coordination and planning, each emerging nation should establish a human resource development system particularly suited to its present and future needs.

HIGH-LEVEL HUMAN RESOURCES

John C. Shearer

BASIC CONCEPTS

The term "high-level human resources" represents those human resources which, by virtue of their relatively high educational and/or occupational attainments, embody significantly greater than average knowledge or skill. These are the persons at the apex of the educational or occupational pyramid. They play the key roles in economic and social development. They give direction and meaning to any nation's efforts to improve the well-being of its people. The ability of any society to progress depends largely upon the quantity and quality of its high-level human resources, that is, on the nation's ability to develop and utilize these key resources. If a country cannot develop its high-level human resources, it cannot develop at all. The efficient use of all resources depends on the nature and efficiency of a country's high-level human resources.

Useful definitions of what constitutes high-level human resources vary roughly with levels of development. Nevertheless, as a general guide for many developing countries, high-level human resources may be characterized as those persons who have attained education beyond the secondary level or whose occupations require an equivalent level of knowledge or skill gained through experience. Educational investment in human beings has many noneconomic goals, but educational investment is also the means for increasing the potential of humans as producers. Thus, education is, among many other things, the developer of human resources.

I use the term "education" to encompass all means, formal or informal, for developing knowledge or skills. In the case of high-level human resources, formal education is probably the most significant of these means, and it is more susceptible to measurement than are other forms of education. Measures of formal educational attainment, that is, of level and nature of training, often constitute good approximations of the stock of human resources in a given population.

The output in terms of quality as well as quantity of a nation's system of higher education is probably the most significant determinant of the future course of that nation. If a nation's universities, technical institutes, and professional schools cannot produce sufficient numbers of well-trained men and women in appropriate fields, development will be seriously impeded or will be impossible. Unfortunately, many universities in developing countries are not adequately fulfilling their proper roles as the main producers of high-level human resources. Too often they maintain patterns inherited from Europe at a time when university education was more concerned with educating the young elite for better use of their leisure than with training the most talented young people for productive careers.

Many universities have been slow in relating their programs and their emphases to the needs of their nations. They often place too little emphasis on the physical sciences, engineering, and agriculture, for example, and too much on law and humanities. For example, in the case of Argentina, a country very heavily dependent on agriculture, only about two percent of the university graduates are trained in any field of agriculture. Probably the most critical shortages of high-level human resources in most developing countries are in the fields of administration and management. Nevertheless, university training in either business or in public administration is very rare. The universities which best serve their nations' needs are usually those which have created the strongest ties with the community. They regularly involve leaders in business and government in the formulation and revision of curricula so that their graduates will be well-trained to fill the community's needs.

Other significant forms of investment in high-level human resources include those in which employers, public or private, use various means to upgrade selected employees through training programs, seminars, or through job rotation. Such investment by employers is often more efficient than are similar efforts by universities because of the close relationship between employer needs and employer investment. Nevertheless, the effectiveness of such investment depends greatly on the value of the education base provided by the universities.

FOREIGN TRAINING

Foreign training can often make unique contributions to the rapid improvement of a nation's knowledge and skills by providing educational resources which are not easily available at home. For many countries progress in a number of fields will depend heavily on foreign university training, especially at the graduate level, until these countries develop adequate programs of their own. However, my study of the relevance of university training in the United States for the high-level manpower needs of other countries reveals that such training often is unrelated to the areas of greatest importance to national development. The data for Latin American graduate students in the United States strongly suggests that few countries use this valuable opportunity effectively. For example, most Latin American countries have given very little emphasis to foreign training in any agricultural specialty, or public administration, despite the fact that almost no university training is available in the latter field outside of a few advanced countries.

MOBILITY

High-level human resources have much greater geographic mobility than do others. These movements, both within a country and between countries, seriously affect development. Personal study suggests that:

l) Richer areas act as magnets which attract human resources, especially high-level human resources from poorer areas.

2) These movements of human resources constitute major subsidies of the richer areas by the poorer areas.

3) The costs to many poor areas of such migration constitute significant offsets to any aid (which itself may be in the form of high-level human resources) provided to these poor areas by rich areas.

4) The migration of high-level human resources may, to a great extent, account for the persistent and often widening gaps between rich and poor areas.

Intra-national Migration

Capital cities are usually the largest and wealthiest cities and those with the greatest concentrations of political, administrative, social, cultural, and economic activities and opportunities. Their populations are growing much more rapidly than are those of their respective countries as a whole, because of large-scale migrations of people from the countryside and from provincial cities. One of the major effects is that in many countries these movements constitute heavy subsidies of the richest by the poorer areas of the country in terms of the costs of the birth, upbringing, and education of migrants. Thus, the capital, already the richest area, obtains the benefits of the investments made in human resources by the poorer areas. The magnitude of these subsidies varies with the proportion of migrants who are high-level human resources, for they bring with them the greatest investment. Migrant groups often bring with them disproportionately large components of high-level human resources. The evidence strongly suggests that these movements are caused by and contribute to the great and increasing disparities in wealth between the capital and the poorer areas.

International Movements

The richest countries attract substantial numbers of high-level human resources from poorer countries. The United States is an especially strong magnet for the scarcest skills of many developing countries. The proportions of high-level human resources in the immigrant groups from developing countries are very large and are often higher than the corresponding proportions in the United States labor force. This heavy flow constitutes a major "reverse flow of foreign aid" from these poor countries to the world's richest country.

A major inflow of high-level human resources to many developing countries is represented by the foreign employees of foreign companies. Despite the potential benefits represented by such foreigners, my studies show that these inflows are often of little real benefit to the host country and may, in fact, seriously impede the development of national high-level human resources. Although the average costs of employing North Americans are at least four times the costs of employing comparable nationals, the great majority of firms depend heavily on North Americans. They justify this by their alleged inability to recruit, develop, and retain qualified nationals. However, a more fundamental problem is their characteristic ineptness in recruiting, developing, motivating, utilizing, and retaining competent nationals. There is a strong disposition by most overseas North Americans to protect their jobs at any cost. They make little effort to recruit or develop nationals for top posts. The low ceilings on opportunities for nationals, with consequent stifling effects on their motivation, morale, and effectiveness, act as strong impediments to the efficient development, utilization, and retention of nationals as evidenced by their very high quit rates.

Migration of high-level human resources, both within and between countries, has serious consequences for national development. To the extent that a country wishes to reduce the great and increasing economic and social differences between areas within a country and among countries, it must concern itself with these movements of high-level human resources, for they seriously impede balanced development. If poor areas are not to resign themselves to falling further behind, one of their urgent tasks is to devise ways, especially systems of incentives, to reverse the heavy outflows of scarce and valuable human knowledge and skills to the rich areas.

3. Manpower Distribution and Utilization

UNEMPLOYMENT AND UNDEREMPLOYMENT IN DEVELOPING COUNTRIES

Frederick Harbison

All human resources problems may be divided into two categories. The first one involves inadequacies of skills and education. These problems can usually be solved with a sufficient allocation of resources. The second category encompasses problems of surplus labor, unemployment, and underemployment. These are more difficult to solve and are, therefore, more serious.

We will begin this discussion by concluding that unemployment is rising rapidly in newly-developing countries regardless of where they are located or what stage of development they have achieved. Furthermore, unlike the developed regions of the world, developing countries will not be able to solve their unemployment problems through the modern sectors of their economies, even if these achieve rates of growth which are twice those of developed countries. Sadly, it is modernization itself which is largely responsible for this unemployment.

THE CAUSES OF UNEMPLOYMENT

Overpopulated countries like Egypt, Pakistan, and India are very familiar with unemployment. India's fourth five year plan, for instance, estimates that unemployment will be higher at the end of the plan period than at the beginning. But, surprisingly, unemployment is also rising in many African countries which are not overpopulated. In Nigeria, Kenya, Tanzania, and Ghana, unemployment will reach crisis proportions within a few years, unless some effective solution is found. Even very prosperous developing countries are experiencing unemployment problems. Zambia, with an economic growth rate of 15 to 18 percent a year, has an extremely high unemployment rate. Venezuela, although rich in oil and iron ore and industrializing successfully, has unemployment rates as high as any country in the world.

What are the causes? The British economist Sir Arthur Lewis has suggested that the abnormally high wage rates in the modern sector of a developing country's economy draw workers from the traditional agricultural sector to the cities, where they are often unable to find work. Lewis maintains that, while the present ratio of wages in the modern sector to wages in the agricultural or traditional sector is 4:1 or 5:1, this ratio should be more like 1.5:1 or 2:1, to eliminate the wage distortions which increase unemployment. Present wage patterns act like magnets in drawing people to the urban areas. Considering the background of poverty from which these people come, they are willing to take a chance. They may face unemployment, but if they are lucky, they may get a well-paying job.

A second explanation for high unemployment rates in developing countries could be that education is usually geared exclusively to the modern sector of these countries. Education tends to raise the aspirations of young people. In its present form, it inculcates them with a desire to participate in the modern sector and with a dislike for working with their hands. As educational opportunities increase in these countries, more people seek entry into the already overcrowded modern sector.

The relatively small size of this modern sector and its limited capacity to absorb labor is a third factor influencing unemployment rates. Not only does the modern sector employ less than 25 percent of the labor force in most developing countries, but it is also under constant pressure to replace men with machines. Employment opportunities do not necessarily increase as industry grows, since technological advances make it possible to expand production without expanding employment opportunities.

The fourth and most fundamental reason for high unemployment rates is the high rate of population increase which characterizes nearly all these nations. The world's population is growing at about two percent a year, faster than ever before in history. Most developed countries have rates of increase considerably less than two percent, while developing countries have rates which are not only well above the world average but which continue to rise. Since advanced countries did not face a population problem when they were developing, the existence of such a problem today is a strong argument for a strategy of development appropriate to the needs of currently developing nations, not just an adaptation of past patterns of development to present needs.

Unemployment in developing countries is a structural problem. These countries are divided into a high wage, technologically developed, modern sector, and a low productivity, subsistence sector. This polarity is becoming more pronounced as the rich get richer and the poor get poorer. Not only is modernization not spreading, but it is actually generating problems which obstruct the progress of the economy as a whole.

Let us look at this situation in a different way. The ratio of an increment in national income or gross national product to an increment in employment (Y/E) is called the incremental output/employment ratio or IOER. The IOER of the United States is 3:1, and it is 2.8:1 for most Western European countries. This same ratio averages 2.5:1 for the modern sector of developing countries. In just about all countries today the increase in employment is less than the increase in GNP, but the ratio tends to become less advantageous with respect to employment as a country reaches a more advanced stage of development with accompanying increases in productivity.

Looking at the labor supply side, we note that in the modern sector of developing countries, the rate of increase of the labor force is always greater than the rate of increase of the population. Should the population increase be three percent, the increase in the labor force will, most likely, be four and one-half percent. If we assume a GNP growth rate of seven percent a year for this same country and IOER of 2.5:1, the increase in employment will be about three percent a year. Thus, the labor force growth in the modern sector will exceed that of employment by one and one-half percent. It is likely that the gap between labor force and employment opportunities will widen as people continue to be drawn to the modern sector, and pressure for increased application of technology further reduces the number of jobs.

In Nigeria, for example, the modern sector employs one million people. The best job creation rate possible is about 80,000 per year. Every year, however, 700,000 people leave school, having attained various levels of education. Assuming that a person who has received some education wants to enter the modern sector, the ratio of available labor force to available new jobs in the modern sector is nearly 9:1. The result is, of course, unemployment of crisis proportions.

ALLEVIATING UNEMPLOYMENT

What are the possible solutions? Sir Arthur Lewis's answer is to lower wages in the modern sector. Cutting the wages of civil servants and of industrial workers would eliminate the main cause of the rural to urban migrations which turn underemployment in the subsistence sector into open unemployment in the modern sector. Lewis's economic logic is impeccable, but his suggestion is politically impractical.

A wage freeze accompanied by payroll and income taxes could be another solution. This one is as impractical as the first, since the governments in most developing countries are not strong enough to withstand the political repercussions of such measures. It is true, however, that wages in the modern sector should be kept down as much as possible.

Overstaffing might be a third possibility. In Kenya, when the unemployment rate was 15 percent, a tri-partite agreement was worked out between employers, unions, and the government to increase hiring by 15 percent. The result was that rural people, hearing about the large numbers of jobs suddenly made available, swarmed to the cities, and the unemployment rate soared to 30 percent.

Fourth, labor-intensive techniques might be encouraged. This is not always economically feasible, however. Most export industries need to use modern machinery in order to be able to compete in price and quality on the world market. Productivity must be high and the result is that capital-intensive, rather than labor-intensive, techniques are usually the only ones appropriate for the modern sector. If labor-intensive techniques are attempted, however, they must be accompanied by efforts to keep wages down. The example of Japan shows that a dual-wage economy is possible. Wages in Japan's labor-intensive manufacturing sector are one-third those of the capital-intensive manufacturing sector.

It has also been proposed that education be curtailed. Education is instrumental in raising people's aspirations and in making them seek work in the urban, modern sector of the economy where, as we have seen, jobs are scarce. Obviously, this solution cannot be given serious consideration since it would be like controlling the rate of population increase by denying medical care in order to raise the death rate.

A solution of similarly questionable value would be to put all the unemployed in the armed forces. If the army could serve as a vocational training organization, this proposal would have some merit. The armies of most developing countries are already so powerful, however, that increasing them would lead to serious, and probably undesirable, consequences.

A seventh possibility is to keep people on the land. Although it has been argued that there are already too many people on the land, it seems fairly clear that this must be the solution to the problem of unemployment in developing countries. People in India and Africa are beginning to starve because they are not producing enough food. In Africa today, the rate of increase in food production is only one-third the rate of increase in the population. Many countries have to use their precious foreign exchange to buy food.

What must be done before people can be induced to remain in farming? Agricultural production must be increased by means of better fertilizers, irrigation, better machinery, and expert extension services. Rural areas need to be modernized, roads built, and housing improved. The wage differential between the modern and rural sectors must be reduced by raising the earning capacity of rural people. Developing countries must face the fact that a rural transformation does not occur without a program of capital investment as well as investment in the development of human resources. Developing countries should abandon their current practice of bleeding the agricultural sector in order to finance urban expansion. The trend should be reversed. Investment in human resources development is particularly vital to the process of rural transformation. High-level manpower, required to develop agriculture, exceeds the number required for industrialization. The task of manning a steel mill is easy compared to the problems involved in training sufficient numbers of specialists in agricultural extension work, credit organization, loan supervision, marketing, and agricultural research.

Even if we find a satisfactory method for dealing with current unemployment problems, however, we are still faced with high rates of population increase. Countries attempting development with a three percent per year population growth rate are like a 300-pound man training for the mile race--they simply have too much weight to drag. A program of family planning is indispensable under these circumstances.

When the advanced countries began to modernize, they had low rates of population increase. Their death rates were much higher than the death rates in developing countries today. Machine technology was still at a low level so that they began by using simple, relatively labor-intensive techniques. In these countries, therefore, the absorptive capacity for labor was higher than that of developing nations today. Education was not as advanced or widespread as it is today, nor were the wage differentials between the rural and the modern urban sectors as marked as the currently are in the developing countries. England and most of Western Europe suffered from severe shortages of industrial labor in the early stages of development. The Enclosure Acts of England testify to the fact that the rural population was not at all eager to leave the land and move to the city. The problems of development have changed so much since the advanced countries began the process that we cannot escape the conclusion that new and original solutions must be found. Manpower planners, particularly, will be challenged to seek new solutions to new problems. At times the task may seem overwhelming. But, to quote John Hilliard, "Hope is at least as logical as despair."

MANPOWER DISTRIBUTION AND UTILIZATION

Morris A. Horowitz

One of the greatest problems in using the term "manpower" is to realize that it is not synonymous with "labor force." "Manpower" may be considered as embodying the existing as well as the potential labor force. The term "potential" should include retired persons, as well as students.

CONCEPT OF LABOR FORCE

In the United States

In the United States the labor force is defined as "those persons 14 years of age and over who are at work or who are actively seeking work." To quantify this concept, sample household surveys are conducted monthly. Anyone who has worked at least one hour during the week in which the survey is conducted is classified as employed--thus part of the labor force. If he is actively seeking work that week, he is also in the labor force but is unemployed. It should be noted that those under 14 years of age are automatically excluded from the labor force, even if they are working. Fourteen was chosen as a cut-off age because it excludes a relatively small number of persons in the labor force. With the emphasis on more education, there has even been some discussion about raising the cut-off age to 16. Also excluded from the United States labor force statistics are persons in jail or asylums and those in the military forces.

In Other Countries

In many parts of the world the term "labor force" refers to the "economically active" population. This is basically the same concept as in the United States, but the definition of those included or excluded varies. In some countries the lowest age included in the statistics is 12. This is important where the very young actually work. In addition many nations have upper age limits as well. From these simple facts one can readily see that comparing the labor force statistics of two countries can be very misleading.

Problems of Definition

The problems of defining the labor force are numerous. Why is the housewife not included? She works hard and often long hours. However, she is not a wage earner. What about the student? Unless he works after school and is paid, he is not part of the labor force. Consider the man who works only one or a few hours during the survey week. Is he really employed? By definition, yes. But can he live on what he earns in this time? Such factors tend to introduce questions about the validity of the data.

Significance of the Concept

Why should there be such concern with the concept of labor force? The labor force represents that part of the total population which is actually or potentially engaged in the production and exchange of goods and services that are available to the population of a nation. The larger the labor force is as a percentage of the total population, the greater the total production or exchange of goods and services. Theoretically it is to the advantage of a country to increase its labor force participation rate. However, if a high proportion of the labor force is unemployed, the country fails to benefit.

DISTRIBUTION AND MANIPULATION OF THE LABOR FORCE

Free Market Forces

Free market forces have many effects upon the size and composition of the labor force. High wages attract those who normally would remain outside the labor force. Students drop out of school to take jobs, retired persons return to work, and housewives may enter the labor force for the first time. On the other hand, extremely low wages also attract people into the labor force. If wages are low, a single wage earner cannot support his family. His wife may seek employment and perhaps the children, too. When wages increase, the wife and children may no longer find it necessary to supplement the husband's income. However, if wages become very attractive they will stay in the labor force. In many areas throughout the world, regular market forces perform the job of distributing the labor force rather well. In the United States, for instance, there automatically is a fairly reasonable distribution.

One should recognize, however, that few labor markets operate completely on an automatic basis. There are various rigidities and institutional factors that prevent the automatic mechanism from operating smoothly. For instance, companies in a monopolistic situation are able to fix wage rates. Educational institutions may be misinformed about the needs of the market. This was true about five years ago in the United States when word leaked out that there was a surplus of engineers. Enrollment in engineering curricula dropped considerably. Later it was discovered that there was no surplus at all. Also, trade unions may put up artificial barriers which prevent free entry into a specific trade.

Government Actions

The government can act in several ways to influence the size of the labor force. Compulsory education to the age of 16 or 18 would exclude persons below those ages from labor force participation. Governments may also increase the military establishment, lower the retirement age, or increase pension allotments in order to reduce labor force participation rates. By requiring a specific number of years of education or training, or licensing, and by offering scholarships or free training courses, the government can encourage entry into specific trades or professions.

Other Forces

There are other forces which have an effect on the distribution and utilization of the labor force. Various sociological, psychological, and cultural factors may induce large numbers of persons to enter a specific profession, and these influences must not be neglected. The legal profession is an example of one which is overcrowded in many countries, but which nevertheless attracts great numbers of new persons. In some countries cultural factors may prevent women from entering certain occupations and professions, in spite of being able to perform well in those jobs.

How significant is the factor of prestige? Why do some people prefer white-collar jobs which pay less than some blue-collar jobs? The relative weight of monetary versus nonmonetary factors will vary from culture to culture. It would be best, therefore, to leave the directing of changes necessary for development to persons who are natives of a country and fully understand the culture.

WAGE POLICY AND ITS RELATION TO MANPOWER AND DEVELOPMENT

Everett Kassalow

In discussing questions of wage policy, we draw upon Western experiences, since industrialization is older in the West and has been studied there more carefully. We must realize, however, that the conditions under which Western wage structure and wage policies developed differed from those existing in the less-developed nations today.

In the crucial nineteenth century, economic development in the West proceeded largely along a path of laissez-faire. This included the free development of wages in free markets, with skill differentials reflected in wage differentials. Later, towards the close of the same century, unions became the workers' bargaining instruments and modified the nature of the labor market in a number of industries. As training and skill levels, as well as the degree of unionization, varied among industries and among employees, there was a "natural" tendency for substantial wage differentials to develop. In the twentieth century, however, the spread of public education and the attainment of higher educational levels by an increasing part of the population tended to have an equalizing effect on qualifications, and wage differentials have declined.

The developing countries, on the other hand, are committed to rapid, centrally planned economic growth. It is "natural" under these circumstances, for government planning to "embrace" some degree of wage planning and wage control. It is not necessarily desirable or practical to plan the entire wage structure. To attempt this would impose excessive restraint on the worker and his organizations (where they exist). It would also impose an excessive burden upon the government.

CHARACTERISTICS OF WAGE SECTORS IN DEVELOPING COUNTRIES

It should be noted at the outset that the wage and salary sector is small in developing countries, comprising only 10 to 20 or 30 percent of the labor force. Secondly, the largest employer of wage and salary earners is usually the central government. This is so partly because of the colonial heritage, since colonial governments tended to control industry, but it also results from the existence of accelerated development plans, which compel the governments to operate some of the heavier industries. One of the most important things governments can do is to realize that they are large-scale employers and can thus affect wages.

A third characteristic of the wage and salary sectors in developing nations is the presence of foreign firms, located in key industries. These firms can pay more because they are larger and more modern than native establishments. They also have higher wages because they are politically vulnerable--they cannot afford to come under attack. In addition, their workers are generally organized and are thus in a better bargaining position. A fourth difference between developed and developing countries is that wage differentials are greater in the latter nations, and that the wage structure is often unrealistic and unrelated to the needs of the economy or the difficulty of the skill.

Tables one and two show that persons with modest skills are often paid two and three times the wages of unskilled manufacturing or construction laborers. Not only are these differentials substantially smaller for developed nations, but the relative value attached to the particular skill in relation to no skill is also entirely different. Wages in developing countries not only reflect differences in skills but tradition, race, religion, politics, and the general scarcity of all skills. Such differentials are wasteful since they do not correspond to the training investment for the various types of workers. They are particularly noticeable between white- and blue-collar workers.

Table 1

Wages of Various Occupations Expressed as Percentages of Wages of Unskilled Labourers in Manufacturing or Construction Industries

SEWING-MACHINE OPERATORS

Place	Wages Compared[2]	Percentage
Stockholm[1]	AE	58
Germany, F.R.[1]	MR	78
Helsinki[1]	PR	80
Manchester	MR	84
Netherlands	PR	95
Georgetown (B.G.)	AR	97
Melbourne	MR	112
Madagascar	AE	115
Malaya[1]	AR	116
Brazzaville	MR	116
Spain	MR	138
Manila	AR	150
Nairobi	PR	153
Douala	PR	167
Bangui	PR	169
Abidjan	MR	171
Accra	MR	191
Bangkok	AR	267

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[1] Female Sewing-Machine Operators.

[2] Since the calculations are expressed as percentages, it is reasonable to suppose that ratios based on MR, PR, AR, and AE are comparable. The Minimum Rates for Accra are usually substantially the same as the Principal Rates and the Average Rates.

NOTE: For Accra, these calculations are based on statistics taken from the Labour Department's "Information on Labour Matters, Ghana" and from collective agreements. Statistics for all other places were derived from "Statistical Supplement: 1961 October Inquiry," International Labour Review, July 1962. The list of places used in this table has been limited by the availability of reasonably comparable figures.

MR = Minimum Rates; PR = Prevailing Rates; AR = Average Rates; AE = Earnings.

Source: ILO Technical Assistance, Report to the Government of Ghana on Questions of Wage Policy, Geneva, 1962.

Table 2

FITTERS

Place	Wages Compared	Percentage
Stockholm	AE	94
Manchester	MR	103
Germany (F.R.)	MR	108
Spain	MR	108
Helsinki	PR	111
Netherlands	PR	114
Melbourne	MR	117
Cyprus	AR	121
Madagascar	MR	144
Douala	PR	172
Manila	AR	196
Abidjan	MR	206
Accra	MR	210
Eastern Region, Lagos	AE	211
Eastern Region, Lagos	PR	214
Malaya	AR	232
Dakar	MR	305

PROBLEMS OF WAGE POLICIES

The nations of Africa, Asia, and Latin America cannot expect simply to repeat the experiences of already developed nations. The machinery used in nineteenth century English mills is now obsolete. Likewise, the labor force has changed since the early days of the Industrial Revolution. New skills and techniques require new wage and manpower policies.

Differentials Based on Prestige

The government should be sensitive to the needs of the economy rather than to tradition and prestige when setting wage scales. If typists continue to receive more pay than carpenters, the training of typists will be encouraged and the shortage of carpenters aggravated. Although some differentials reflect differences in education, many white-collar occupations do not require special training. In the long run, it is more efficient to train typists quickly when needed, since typing is a relatively easy skill to acquire, than to perpetuate wage scales based on status and prestige. Governments are slow, however, to make these changes.

Differentials Based on Race

Many of the skilled jobs in developing countries have traditionally been held by Europeans who had to be paid four or five times the normal wage to attract them to places far away from home. What happens when a European railroad engineer leaves, and you replace him with an African engineer? Do you pay the African the wage paid the European, or do you admit that the higher wage was out of line and should be brought down? This is a difficult political decision, but unless these situations are rectified, the wage structure will continue to be distorted.

Urban-Rural Differentials

Per capita income among urban workers is greater than per capita income in rural areas. This has many undesirable effects, but there appears to be no ready solution for the problem. We have no evidence from developed countries that rural areas gain with respect to urban areas in the development process. Table three shows that in the twentieth century, earnings in manufacturing were higher in all of the countries cited except New Zealand. In a number of countries they were more than twice as high. Furthermore, in all countries but the United States and New Zealand, the ratio of earnings in manufacturing to those in agriculture was actually higher in the twentieth century than it had been in the nineteenth.

Table 3

Trends in Ratio of Money Income Per Person Engaged in Manufacturing
To That Per Person Engaged in Agriculture

Country	Early Period		Recent Period	
	Period	Ratio	Period	Ratio
France	1815-1898	1.50	1906-1949	1.89
Germany	1882-1899	1.42	1905-1951	2.16
Sweden	1869-1901	1.81	1909-1951	2.52
United Kingdom	1895	1.08	1911-1954	1.46
Italy	1862-1901	.94	1906-1954	1.63
Hungary	1899-1901	1.66	1911-1943	2.12
Japan	1878-1902	2.29	1903-1942	2.41
Canada	1880-1900	1.23	1910-1953	2.03
United States	1869-1899	2.17	1904-1954	1.67
Australia	1891-1901	.71	1911-1939	1.04
New Zealand	1901	.65	1926-1936	.53

Source: Hagen, Everett E., "An Economic Justification of Protectionism," The Quarterly Journal of Economics, November, 1958.

Table four gives further evidence of the inability of agricultural income to catch up with that of other sectors. We note that the relationship has improved substantially since 1940 in all three of the advanced countries for which data is given, but that per capita income in the primary sector remains far below that of other sectors. The improvement which is evident is the result of deliberate governmental intervention on behalf of agriculture in the form of subsidies. This can be attempted only as the agricultural sector shrinks in a modern society. Nevertheless, subsidies reflect mainly political reasoning and are not good economic policy.

Table 4

Economic Structure of Rich and Poor Countries

Per Capita Income in the Primary Sector as Percentage of the Per Capita Income In the Other Sectors*

Period	England	United States	Japan
1301-1400	79		
1401-1500	70		
1501-1600	66		
1601-1700	69		
1701-1800	50		
1801-1810	52		
1811-1820	53		
1821-1830	34	34	
1831-1840	44	35	
1841-1850	43	36	
1851-1860	44	37	
1861-1870	48	39	
1871-1880	43	37	
1881-1890	43	37	33
1891-1900	42	45	39
1901-1910	43	46	40
1911-1920	44	42	42
1921-1930	44	29	35
1931-1940	49	33	26
1941-1950	71	55	--
1951-1960	76	49	37

*Computed from G.F. Steffen, Studien zur Geschichte der Englischen Lohnarbeiter (1905), Vols. I, II, III; A.L. Bowley, Wages and Income in the United Kingdom since 1860 (1937); A.L. Bowley, Wages, Earnings and Hours of Work, 1914-1947 (1947); J.R. Bellerby, Agriculture and Industry (1956), and an unpublished paper by W.L. Posthumus; K. Okkawa, The Growth Rate of the Japanese Economy (1957).

Source: Zimmerman, L.J., Poor Lands Rich Lands: The Widening Gap, New York, Random House, 1965.

Because of the above evidence, it is difficult to foresee that greater urban-rural wage equity can be expected in the foreseeable future. Some argue that an urban wage freeze might help, but this is likely, at best, to be temporary in its effects and may have political disadvantages. The smaller urban sector is better organized, more easily aroused, and in a more strategic position to upset the country's economic and political equilibrium than the rural population.

DETERMINING WAGE POLICY

There are no general set rules for determining wages. Wage differentials should be studied with great care, and education may be used to increase the supply of skilled labor where most needed. Collective agreements between labor and management or between labor, management, and the government should be encouraged. There should be close cooperation between educational, manpower, and financial authorities.

Minimum Wages

In many developing countries, particularly in Asia and Africa, the masses of unskilled workers are in a bad bargaining position. The minimum wage is the going wage, and it may be below the subsistence level. Establishing a legal minimum is always difficult, but it becomes particularly so in developing countries with limited resources and great economic problems. What should be used as a criterion? Should we consider human need or stark economic reality? In agriculture and mining it might be wise to set relatively high wages, in order to attract people to these sectors. However, if wages are too high, investment will flow from labor-intensive to capital-intensive industries and employment will be affected adversely. It is also dangerous to set wages too high in the modern sector. The result would be an increased influx from the rural areas. One must somehow strike a balance between the need to attract both workers and investment capital to certain industries.

Traditional Payments

Although traditional payments cannot, and should not, be totally abolished, they are economically difficult to defend in that they relate wages to criteria other than productivity. There are two kinds of traditional payments--in the one, wages are related to seniority, and in the second, wages consist of payments in kind. The first is particularly prevalent in India and parts of Asia, and, to a somewhat lesser extent, in Africa. Each year wages are increased as a reward for faithful service. Thus, old workers with little or no skill receive better pay than young, highly skilled workers. Payments in kind are very limiting to the economic development of the region in which they are common. They also are not attractive to workers with any education or training and cannot serve as an accurate measure of the workers' worth.

Recommendations

It is not advisable to freeze wages in the urban sector, but, at the same time, it is not wise to allow all profits to flow into increased wages. The manpower planner should realize the importance of having the fruits of increased productivity go into new investments as well as wage increases. Productivity measurements are crude, but some attempt should be made to apportion economic gain between labor and management.

The central government is ill-advised to lay down an entire wage structure, but it may make recommendations for key rates. For example, in some African countries key wage rates are set for truck drivers and typists. These key rates can then guide labor and management in establishing other wages. The public sector can perhaps become a partner in the wage-setting process but must not assume sole responsibility. Tripartite labor-management-government councils have been attempted in Africa and in Asia with some success.

Opinions differ about whether modern industry, which can afford to pay higher wages, should do so in the face of the low wages prevailing in other sectors of the economy. Some feel that these companies should keep their wages down. Nearly every developing country has a dual economy, however. Labor markets are not perfect and cannot be forced to function perfectly. They can be watched, however, to assure that things do not get out of hand.

Professor Harbison discusses problems of interest with a Latin American group.

C. THE ADMINISTRATIVE FRAMEWORK FOR PLANNING

INTRODUCTION

In manpower planning, as in any other systematic national effort, success or failure often depends on the institutions available to carry out the proposed programs. The best thinking and most carefully worked out strategies are useless if the proper channels are lacking for their implementation. It should always be kept in mind, however, that it is the objective of any organizational arrangement to facilitate the work to be done. New organizational units may be needed to carry out new functions, but only if existing bodies cannot be used to do so. The kind of framework required for a particular plan is shaped by the nature of the plan itself. Mr. Hilliard cautions against the negative effects that result from establishing too complex a bureaucracy. Such a system impedes communication between the various levels of the administrative apparatus, causes crucial time lags, and often results in frustration on the part of those for whose benefit the plan was originally developed. Mr. Hilliard calls implementation the most difficult stage of manpower planning. In the process, the planner must be sensitive to many phenomena entirely outside of what is usually associated with manpower research--among other things to the political possibilities in the nation concerned.

Mr. Earl suggests that anyone wishing to assess the nature and effectiveness of a particular manpower policy ask how this policy is made. Thus he would pose questions regarding the identity of the decision-makers, their location in the hierarchy, and the position in the decision-making apparatus of the main body executing manpower policy. He feels that most countries have some commitment to full employment and to the efficient utilization of manpower, but that the extent of these commitments and the true character of the manpower policy cannot be determined unless the institutional process is analyzed.

The role of institutions in the process of human resources development is discussed by Mr. Levine. He divides all jobs into three large categories--those for which technical knowledge is the key element, those for which occupational skills are of prime importance, and those which require so little of either that they do not call for any type of specialized training. Different training institutions are needed for each group. Mr. Levine mentions a number of these and evaluates the benefits of training inside and outside the formal school system.

Mr. Merson is concerned with the institutions needed to carry out an active employment policy. He discusses the elements of such a policy, evolves an eight point program designed to achieve it, and lists its objectives. In a subsequent lecture, Mr. Merson outlines a possible government organizational structure to put the manpower policy into effect. He also shows how a comprehensive national manpower policy may produce increases in the GNP and expresses himself in favor of a manpower policy which focuses on the improvement and utilization of the current labor force, rather than one which is mainly oriented toward the future. In conclusion, he reiterates that manpower planning and the implementation of plans is a highly complex undertaking, but that the U.S. Government through the Agency for International Development is able to offer a considerable variety of consulting services.

IMPLEMENTATION OF MANPOWER PROGRAMS

John F. Hilliard

My talk today focuses on the functions and problems of manpower planning. An unfortunate popular conception equates the sum and total of manpower planning efforts with manpower studies and research alone Indeed, so pervasive is this line of thinking, that 90 percent of the manpower studies undertaken in developing countries never bear fruit in terms of leading to action programs. This, in turn, has led to an agonizing reappraisal in many countries, including our own, of the very value of manpower planning.

The scholarly purposes of manpower planning are only incidental to the primary aim of developing courses of action. It is in finding solutions that the manpower planner makes his contribution, and the following areas beyond the research phase can be suggested.

FACTORS IN MANPOWER PLANNING

Impact of Modernization

Most planners fail to grasp the impact on employment of a basic policy of modernization for industry and agriculture. Even though modernization schemes are often undertaken as a means of creating employment, they usually have virtually no effect on unemployment. Emigration is many times more effective as a means of reducing unemployment in a country. For example, Jamaica's five year development program, 1958 through 1962, created some 7,000 new jobs as a result of industrial expansion on that island. During the same period, however, 30,000 persons emigrated to North America. I am not advocating emigration as a solution to unemployment, since the people involved are generally the ones who can most contribute to their own country's development. Nevertheless, we should recognize that the conventional outlook regarding employment may no longer be appropriate.

Urbanization

The manpower planner frequently does not include urbanization as one of his most pressing problems. Yet, no big city in the world escapes the mass influx of job seekers from the country, which is accompanied by high levels of unemployment. The efforts of the city planner should be intimately linked with those of the planners in the fields of manpower, education, health, etc. When crises of violence erupt in the city, the trigger is usually unemployment.

Education

The qualitative aspects of manpower should be considered by manpower planners. Modernization demands fewer but more highly qualified workers, and studies have shown a positive correlation between educational levels and productivity. The economic value of education has led many countries to adopt various forms of worker training and development.

Choices Regarding Technology

The manpower planner is apt to involve himself in the problem of conflicting choices regarding the allocation of resources--labor-intensive versus capital-intensive. Yet there are fields which can absorb a good deal of labor in a blend of modern and traditional technology. Cost/benefit ratios are a much better guide in this kind of planning than the vaguer resource intensity considerations.

Population Policy

The question of population policy involves two main aspects: a) moral values and religious precepts, and b) social policy and economic consequences. Although the manpower planner is not qualified to address himself to the moral implications, he should be conversant with the social and economic aspects.

Wages and Salaries

In many developing countries, on the other hand, the inherited colonial wage and salary structure has been an impediment to development. Incentives are geared to the least productive areas, resulting in a maldistribution of the labor force. It is not suggested that the manpower planner right the wrongs of centuries, but, like the country doctor, he should be able to intelligently diagnose the problem, regardless of whether his advice is acted upon.

Motivation and Morale

Perhaps the most important factor in national development is the deep-seated will to develop of the majority of the citizens. Although people respond to the larger issues of national pride and patriotism, such stimulants eventually erode, unless they can be identified with concrete ways for self-improvement and betterment by the populace. During World War II, the United States labor force participation rate of women and older people was quite on a par with that of the Union of Soviet Socialist Republics which was using coercion. Yet, today the Soviets have outdone us in guiding their people to critical occupations through the use of highly effective incentives. The entire incentive system should be reshaped, so that over the span of the economic development plan, built-in incentives are provided to encourage people to enter jobs most important to national development.

Investment in Education

Education and manpower planners should act jointly to develop educational programs rather than have separate doctrines. There are a myriad of proposals forwarded on the allocation of resources for education. Some planners favor concentrating most resources on university education. But good higher education is of no value if a solid base of primary and secondary schooling is lacking. A systems approach is best for solving this dilemma.

Vocational education is also controversial, with some planners highly in favor of having such education in schools, while others consider it wasteful and emphasize on-the-job training as the answer. Vocational education as a part of general education is yet another possibility. Such an investment is cheaper and less time-consuming than formalized vocational school programs. Good general education was once considered too expensive as it does not train people for specific jobs, but this kind of thinking has receded in recent years. Planners are increasingly recognizing that nothing can replace the solid base provided by a good general education.

Women in the Labor Force

Not very long ago it was vaguely immoral for women to work in the United States, yet now women constitute a very large and productive part of the American labor force. In other parts of the world, women have not yet assumed a place in the cash economy of their countries. But growing numbers of women are attending schools in Africa, the Middle East, and Latin America, and these can never return to their traditional roles. In view of this smouldering female revolution, planners will be increasingly concerned with the problems of integrating women in the labor force without creating employment crises.

In summary, while we must continue our emphasis on quantitative aspects, we must increase our study of qualitative and long-range issues. Most developing countries have adopted the definitions of manpower, employment, and unemployment, etc. used here in Washington, D.C., yet these may be totally unacceptable to existing situations elsewhere. Therefore, definitions need to be modified for your own purposes. Developing countries with similar problems should get together and work out their own definitions.

IMPLEMENTING THE PLAN

Implementation, which implies the mobilization of resources for the attainment of specific goals, is the most difficult stage of manpower planning. A country's manpower supply is its one resource that cannot be stockpiled. The planning and handling of human resources must be carried out as carefully and intelligently as possible. In all of his endeavors, however, the planner must guard against too much organization. Lurking in everyone is the virus of bureaucracy.

Occasionally, the specific manpower needs projected in a development plan may not be consonant with the real needs of the country. In India, for example, the second five year plan included a projected need for civil engineers which was based on the experience of the last years of the colonial period. Since the British were concerned mostly with building earth works, and since the need in independent India was for electrical and chemical engineers, the quota of civil engineers derived from colonial experience was, of course, too high. A group of United States advisors convinced the Indian government of this fact, and the result was that night classes were established and university curricula were revised to encourage students to choose chemical and electrical rather than civil engineering.

This example suggests that those implementing a manpower plan should not be satisfied with a passive role. The manpower office should play a creative part in planning, by challenging statistics and by staying in the forefront of thought about the nature and timing of projecting manpower needs.

In addition, the manpower planner has an educational role to play. He must constantly try to interpret and explain the importance of human resources planning at all levels of society, in order to make manpower planning a national concern. In some countries, manpower planners have a tendency to hoard their knowledge and keep their surveys and research secret. These practices discourage the diffusion of interest in manpower problems. The planner's goal should be, rather, to stimulate others to do research and to spread enthusiasm for the kinds of problems which concern him.

A POLICY OF FULL EMPLOYMENT

Lewis H. Earl

Each country has a manpower policy either clearly enunciated and published, as in International Labor Office Convention 122, or hidden in the subconscious actions which affect manpower. The latter was the case in the United States until recently. The manpower policy determines how manpower will be utilized, allocated, and developed for national objectives.

A passive manpower policy, i.e. ignoring the manpower factor in all policies and programs for economic growth, may be the simplest way of insuring that manpower policy is coordinated with other economic and social policies. But it is hard to imagine a society that does not have some programs or policies that are based on an underlying assumption of some rationalized utilization of manpower. Programs for education, defense, stabilization of currency, conservation of natural resources, etc., carry basic assumptions with respect to manpower utilization.

Most free countries have made some commitment to the objective of full employment. ILO Convention 122 has established the standard of "full, productive, and freely chosen employment" as a common objective. This standard is subject to considerable variation depending on the interpretation given to the terms "full," "productive," and "freely chosen." "Full employment," for instance, is hard to quantify. In the United States, 3.8 percent of the labor force is unemployed; in Sweden, only .7 percent of the labor force is unemployed. Does either, or neither, country have full employment? The term "productive" is also subject to a variety of interpretations. By "freely chosen," we usually mean individual freedom in occupation choice and in the movement from one occupation to another.

Full employment is only one of many national objectives or goals. The national commitment to full employment may need to be balanced against commitments to other national objectives such as a stable currency, a favorable balance of trade, a satisfactory level of foreign exchange reserves, stable wages and prices, agrarian reform, and adequate national defense. The true character of manpower policy may be determined by the degree to which it is compromised with other national objectives with which it may conflict.

Despite declarations of a clearly stated manpower policy, the real test of what the national manpower policy is may be determined by the adjustments (social, cultural, etc.) that are made to accommodate other national objectives. An active manpower policy determines the programs for its implementation and the institutions and agencies which will administer these programs. Manpower programs and institutions, in turn, affect, and often determine, the final nature of manpower policy.

Therefore, in analyzing the kind of manpower policy a country has, it is advisable to begin by asking how manpower policy is made. Who are the decision makers who set forth the policy--the president, the legislative body, planning groups? What other decisions or policies are made by the same authorities? Should manpower policy be made by the same authority responsible for its execution? Which national organization has the greatest responsibility for the implementation of manpower policy? Does its location in the decision-making apparatus insure that manpower policy will not be overlooked when other decisions are made? How is manpower policy-making influenced by other decisions? What is the relationship of manpower policy to overall policy-making?

An evaluation of a particular manpower policy also calls for an investigation of the procedures used by the agencies and organizations making and implementing policy. A pertinent question that might be raised is--what are the elements of a manpower program and how are they related? Guidelines to the parts of a manpower program are presented in a recommendation adopted in 1964 by the Organization for Economic Cooperation and Development which enumerates various elements such as employment services, training and retraining, geographic mobility, and assistance to marginal groups of the labor force. The employment service implements manpower policy on the local level. Training and retraining programs are important in a rapidly changing society. An active manpower policy recognizes the need for retraining. Geographic mobility can be handled either by moving people to the jobs or moving jobs to the people. A combination of these may be best. The OECD also recommended special assistance to economically disadvantaged groups such as women, older workers, handicapped workers, etc.

INSTITUTIONAL CHOICES FOR MANPOWER TRAINING

Joshua M. Levine

DETERMINING THE TRAINING OBJECTIVE

Mr. Walsh demonstrated the need to examine the preparation received by the labor force. He pointed out that this can be accomplished by studying three main elements that go into qualifying a labor force: 1) basic education, 2) technical knowledge, 3) occupational skills. He also stated that any job can be analyzed on the basis of these three elements, that within each job the quantity and importance of these elements may vary, and that the kind and extent of training or education must be directed towards these variations. My purpose is to discuss the role of institutions with respect to the variations in these three basic elements.

In some jobs, technical knowledge is the key element and occupational skills are of proportionately minor importance. In such jobs, basic education itself may be relatively unimportant to job performance but serves as a necessary prerequisite to the acquisition of technical knowledge. In other jobs, occupational skills are extremely important, while technical knowledge plays a very small role. For these jobs, basic education can be limited to that required for the acquisition of the occupational skill. Finally, there are jobs which demand very small amounts of technical knowledge and so little of occupational skill that they can be performed without any type of specialized training. There is a great deal of philosophical and academic argument about this point, but we will return to this discussion later.

MATCHING OBJECTIVES AND INSTITUTIONS

If we look at jobs in this way, the functions of various kinds of institutions in preparing the labor force become clearer. Unfortunately, no country has thus far devised the best possible mix of the various kinds of education needed for different job levels. To a degree, therefore, what we say here is theoretical and conjectural. There is no "conventional wisdom" on this subject, and many doubt that there ever will be. All we can do is transmit to you some of the accumulated experiences of people who have worked in this field and hope that you will arrive at the best answers for your own country.

In every country there are many institutions which contribute to preparing the labor force. The most common, of course, are the schools. Vocational training for information may be provided in both elementary and secondary schools. It has been observed, however, that in developing countries the number of people who stay in school long enough to reach secondary school is comparatively small. Accordingly, some people argue that vocational training should be provided as early as possible, so that anyone who has had a few years of school will have been exposed to some form of vocational education. Others feel that the child at elementary school age is incapable of profitably absorbing occupational skill and that vocational education should, therefore, not be offered until the secondary school level.

At the secondary level, some nations have tried to prepare individuals for the world of work by establishing physically separate vocational schools under the supervision of the formal school system. Others have tried including vocational courses as part of the regular academic curriculum. Still others, of course, have never attempted to provide any vocational education at all.

Another public system for vocational training is one which is not normally under the supervision of any government ministry but receives guidance from an advisory body in which the ministries of education and labor, as well as employers and the trade unions, are represented. It is financed by payroll taxes charged to employers. First developed in Europe, this system grew rapidly in Latin America and elsewhere. The payroll tax assures these vocational training programs a permanent income, and the fact they are not connected with any government agency means that their administrators are relatively free to make policy decisions. Thus these programs tend to be more flexible than the formal school system and can use the guidance of the private sector to determine manpower needs. In Latin America, examples of such training institutions are SENAI and SENAC in Brazil, COMET in Argentina, INCE in Venezuela, SENA in Colombia, SENATI in Peru, and INA in Costa Rica.

It is imperative not to overlook the training capacity of industry, commerce, and agriculture. In the United States, research on sources of labor force preparation[1] has indicated that about 65 percent of the United States' labor force is trained on the job. It appears, then, that on-the-job training cannot be overlooked in any national training plan.

Another interesting fact which came to light is that the armed forces constitute the second most important source of trained people. The part played by the military establishment in occupational training is often overlooked on the unspoken assumption that preparation is provided only for military occupations. It has been clearly demonstrated in the United States, however, that in several occupational areas the military is not merely one of the sources of trained labor but indeed is the primary and most important source. This was particularly true in the air transportation and aircraft industries after World War II, when the experience of so many military-trained pilots, navigators, and aircraft repairmen was transferred directly to civilian occupations. Similarly, television and electronics manufacturers eagerly sought men who had worked in radar and other communications media during wartime military service. The same factors apply, although to a lesser degree, to peacetime military skills. The usefulness of the military services for occupational training is beginning to be recognized in developing countries, but they have rarely been relied on as an integral part of a national plan for labor force preparation.

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[1] U.S. Department of Labor, Manpower Administration, Manpower/Automation Research Monograph No. 2, Formal Occupational Training of Adult Workers, December, 1964.

The correspondence school is third in importance as a source of technical education and vocational preparation in the United States. Its curricula may cover the entire field of education from elementary and secondary through higher studies, including specialized postgraduate work. It has only recently been recognized as a bona fide institution of higher learning.

Still another source of trained manpower is the private training institution. In the United States, these institutions are most common in connection with commercial training (typists, stenographers, bookkeepers, accountants), but they have also been significant contributors to training for occupations in electronics, aviation, and other industries.

Technical schools or institutes usually arrange their curricula very specifically to produce competence in certain middle-level manpower areas such as junior engineers, accountants, medical technicians, and the like. Interestingly, many technical institutes in the United States have developed into four-year colleges or universities, although they continue to specialize in technical or scientific fields. Notable among these are the Rensselaer Polytechnic Institute in Troy, New York, and the Massachusetts Institute of Technology in Cambridge, Massachusetts.

The junior college provides two years of post high school education, and most junior colleges design their curricula to enable students to complete the remaining two years required for the Bachelor degree at a regular university. Junior colleges are not usually directed towards any specific vocation but simply extend the basic education of primary and secondary systems to somewhat higher levels.

Thus far we have only mentioned the colleges and universities themselves in passing and have entirely overlooked the interesting recent developments with respect to graduate study. A growing number of university graduates go on to acquire advanced degrees. This is the result of the increasing demands made by professional work.

The manpower planner should be aware of these various sources of labor force preparation, their strengths and weaknesses, and their purposes, as it is he who must advise his government on the best use of these programs. His position is crucial to the process of decision-making in the area of human resource development, and the inventory of educational systems is an indispensable guide to him.

CHOOSING INSTITUTIONS IN DEVELOPING COUNTRIES

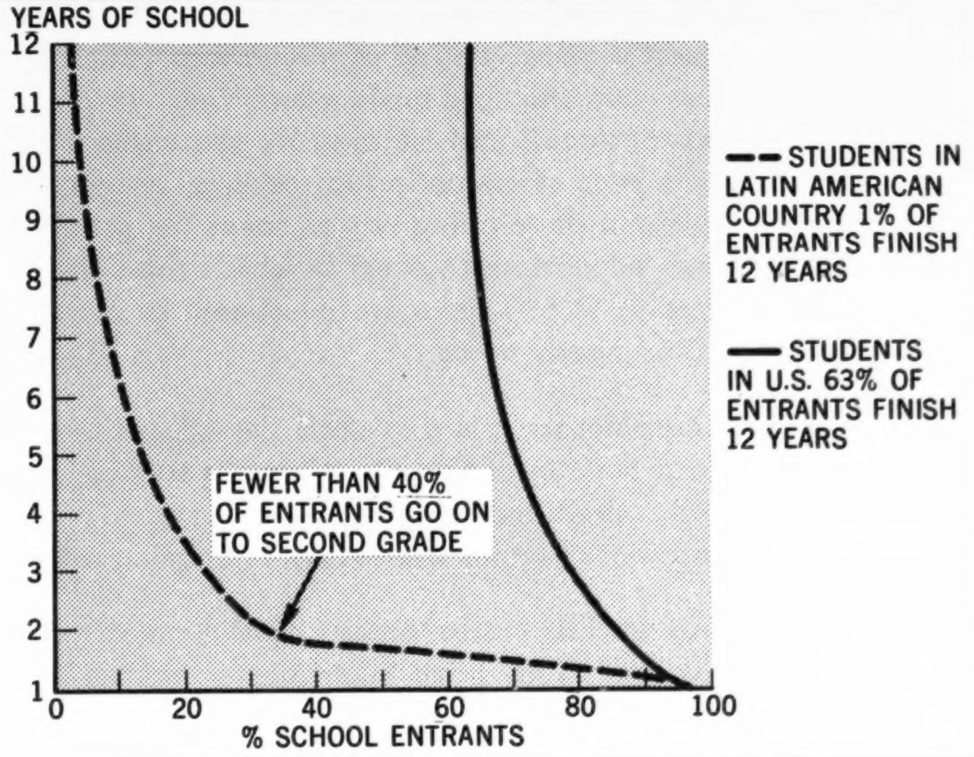
It is one thing to make decisions concerning manpower institutions in a country in which basic education is available for virtually every member of society, and quite another in a country where the educational system struggles to achieve an elementary education for only about one-half of its population. To demonstrate the differences in potential decisions in this area, I would like to compare for you the educational systems of a Latin American country, with which I happen to be familiar, and that of my own country.

In the Latin American country 88,000 children, almost all of those eligible, enter the first grade. Only 33,000 enter the second grade. This decline continues until only 920, or a little over one percent, finish secondary school (see graph No. 16). Only 170 or .2 percent of the original 88,000 graduate from the university. Although the country I am describing exhibits one of the worst educational situations in Latin America, it is not atypical among developing countries. In a much wealthier Latin American nation, only 2.7 percent graduate from high school and .5 percent, from the university. By comparison, in the United States 63 percent of those who enter the first grade graduate from high school and 15 percent graduate from college.

GRAPH 16

EDUCATIONAL ATTAINMENT IN LATIN AMERICA AND THE U.S.

In Latin American country 60% of students drop out after first grade.



As the curve for the Latin American country indicates, very few of those who might be taught ever reach the secondary school level. To me the implications of this fact for planning vocational training are very clear. Those persons who are most likely to enter the subprofessional or manual skill areas have already dropped out of the system by the time the secondary level has been reached. If they are to acquire occupational skills, the training will have to be offered outside the formal school system.

Furthermore, if the reasonable assumption is made that the portion of the population which moves through the secondary system is likely to aim for managerial, administrative, and professional jobs rather than for those requiring vocational skills, then the wisdom of trying to incorporate vocational training in secondary schools becomes even more questionable. The essential prerequisites for management, administrative, and professional jobs are basic education and technical knowledge. Occupational skill is much less important. Thus the planner should devise an educational system in which training for occupational skills plays only a small role in the preparation of people for these higher level jobs.

It must be pointed out that a country's educational pyramid is not static. A multitude of pressures for change are exerted on it. Rising aspirations and increasing recognition that higher levels of living are achievable only within the context of a complex society are two of the powerful forces which will tend to widen the educational pyramid of a country. The planner must take these forces into account. With or without planning, the number of people completing the third, fourth, and ultimately the sixth and eighth grades will increase. And as these numbers increase, the decisions concerning the allocation of funds and the distribution of responsibility for education and training will also change.

Let us examine some of the factors which influence such decisions. I have arrived at my own conclusions, and my bias may show. The first factor is very simply a matter of money. Most educational systems in developing countries cannot afford vocational training which is the most expensive kind of education. Such training is from five to 13 times more expensive than standard basic education. In other words, the cost of an hour, a month or a year of vocational training for one student is the same as the cost of an hour, a month or a year of education in reading, writing, and arithmetic for from five to 13 students. When a developing nation faces the problem of allocating scarce funds to an impoverished educational system in which the demand for funds always greatly exceeds the supply, it can make an investment in vocational training only at the expense of many other needy areas.

The second important consideration is that until the educational pyramid widens to the point where a substantial portion of the labor force is successfully moving through the secondary school system, vocational education as part of that school system is wasted. It simply does not reach those people who wish to become craftsmen.

Third, the economists as well as entrepreneurs have come to recognize that vocational training has a market value. They have found that a trained worker's increased productivity more than compensates for the cost of training him. Thus, it is profitable to train the work force. From this point of view, that sector of the economy which most profits from the training should bear the burden of the cost of the training. Vocational training is one area in which the government should take every opportunity to shift the burden to private industry.

Finally, the efficiency of on-the-job training is much higher for a variety of reasons including better facilities for demonstration and reduced inputs of nonessential learning. Furthermore, the worker is more highly motivated because of the direct relationship between learning and application.

I have come to the conclusion that a nation's soundest investment in vocational preparation is one which emphasizes training outside the formal school system. Nor am I alone in reaching this conclusion. No less a philosopher on the human resource development problem than Mr. Frederick Harbison holds very firmly to this view and so, to a degree, does my colleague Mr. Walsh.

ADMINISTRATION AND INSTITUTIONS FOR THE DISTRIBUTION AND UTILIZATION OF MANPOWER I

Burnie Merson

FACTORS AFFECTING DEMAND AND SUPPLY

Before any action can be taken on manpower planning there must be a body of accepted doctrine to use as a base. But while one should think in terms of the doctrine, one must be ready to reexamine and reevaluate one's assumptions at all times.

The field of manpower requires macroanalysis by its very nature, and unless we study the demand for and supply of labor in this manner, we shall be able to make little if any sense out of the mass of details with which we must work. As Mr. Walsh pointed out yesterday, for instance, when a worker is retrained to take a higher skill position, he leaves a vacancy in a lower skill. This illustrates clearly the link between the upgrading of skills and job creation. A manpower planner must use this kind of analysis if he wishes to keep track of important relationships.

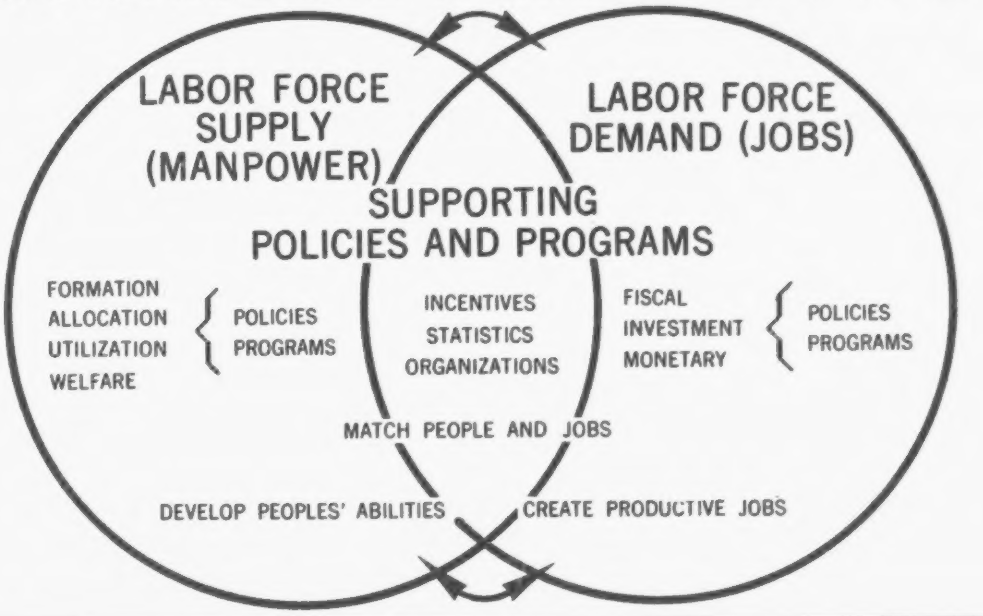
Another example of the interdependence of demand and supply may be found in such measures as minimum wage legislation. While it affects the supply of workers via monetary incentives and is a socially desirable goal in itself, it also affects the demand side of the market. The workers will have more money and thus greater purchasing power. This in turn will call for the production of more goods, which requires additional workers. As the worker gets more money, he is also likely to increase his savings which become available for investment. This further benefits the demand for labor.

The impact of such measures as payroll taxes is also double-edged but on the negative side. While such a tax may seem to be a good means of financing training, it may affect employment adversely since it represents higher labor costs.

Labor-management relations also affect the demand for and supply of labor. If, for example, contract negotiations reach an impasse and a strike results, a plant ceases to produce and, therefore, needs no new supplies. As a result, suppliers may cut back production and lay off workers. It may set off a chain reaction with losses which may not be fully recoverable after the original strike has been settled. The graph No. 17 illustrates the interrelationship of the demand for, and supply of, labor.

GRAPH 17

ELEMENTS OF ACTIVE MANPOWER AND EMPLOYMENT POLICIES FOR ACHIEVEMENT OF COUNTRY DEVELOPMENT GOALS


LABOR FORCE SUPPLY (MANPOWER)
LABOR FORCE DEMAND (JOBS)
SUPPORTING POLICIES AND PROGRAMS
FORMATION
ALLOCATION
UTILIZATION
WELFARE
POLICIES
PROGRAMS
INCENTIVES
STATISTICS
ORGANIZATIONS
FISCAL
INVESTMENT
MONETARY
POLICIES
PROGRAMS
MATCH PEOPLE AND JOBS
DEVELOP PEOPLES' ABILITIES
CREATE PRODUCTIVE JOBS

AN ACTIVE MANPOWER AND EMPLOYMENT POLICY

The acronym AMEP embodied in the title of graph No. 17 signifies the broad challenge facing the manpower expert. Within this broad framework, FAUWISO signifies the acronym for labor force formation, allocation, utilization, welfare, incentives, statistics, and organizations--the essential elements needed to formulate an active manpower policy. Each element represents an integral element of the total unit the manpower administrator must oversee. A summary of these elements is presented in graph No. 18.

Formation

As a country industrializes, it is faced with the problem of obsolete skills. The new jobs which accompany industrialization often force people with old skills into the ranks of the unemployed. The manpower administrator must address himself to this problem. A mobile labor force may be an answer, but some countries discourage mobility, feeling that it is better to concentrate training in a formal educational system. In the United States, we encourage worker mobility because we believe that a great many skills are acquired as workers move from job to job. The administrator must decide which is the best policy in view of the economic system of the country concerned. Professional societies, books, and foreign technical assistance programs are also useful in forming a qualified labor force.

GRAPH 18

EIGHT-POINT MANPOWER AND EMPLOYMENT PROGRAM
FOR FULL, PRODUCTIVE, FREELY CHOSEN EMPLOYMENT

1. FORMATION OF QUALIFIED LABOR FORCE • ON-THE-JOB SKILLS UPGRADING • APPRENTICESHIP / WORK TRAINING • RETRAINING/WORKER MOBILITY	5. LABOR FORCE INCENTIVES • WAGES AND SALARIES/FRINGE BENEFITS • SUPERVISION/HUMAN DIGNITY • JOB PRESTIGE/WORKER MOTIVATION
2. ALLOCATION OF LABOR FORCE • GEOGRAPHICALLY/OCCUPATIONALLY • BY ECONOMIC SECTOR/RURAL-URBAN • AMONG PUBLIC AND PRIVATE EMPLOYERS	6. LABOR FORCE STATISTICS • OCCUPATIONAL SHORTAGES & SURPLUSES • LABOR FORCE LEVELS AND TRENDS • PRODUCTIVITY, JOB, WAGE DATA
3. UTILIZATION OF LABOR FORCE • GOOD LABOR-MANAGEMENT RELATIONS • EQUAL TRAINING/ PROMOTIONAL OPPORTUNITIES • DECENT WORKING CONDITIONS	7. LABOR FORCE ORGANIZATIONS • SKILLS TRAINING/EMPLOYMENT SERVICES • SOCIAL SECURITY/LABOR STANDARDS • TRADE UNIONS/MANPOWER STATISTICS
4. WELFARE OF LABOR FORCE • FREEDOM OF TRAINING, JOB, MOBILITY CHOICE • INCOME MAINTENANCE PROGRAMS • FAIR MEDIATION/CONCILIATION LABOR DISPUTES	8. JOB DEVELOPMENT • COOPERATION WITH FISCAL & MONETARY AGENCIES • FILLING KEY JOB VACANCIES • REDUCTION OF STRUCTURAL UNEMPLOYMENT

Allocation

While maintaining freedom of choice, the manpower administrator must provide the best organization of the labor market to attain the country's social, economic, and political objectives. He may implement his plans in a variety of ways, such as giving financial help to those wishing to study abroad in needed fields of study. The administrator must also choose between allocating labor to the private or public sector and to the military or civilian sectors.

Utilization

Since we are striving for increased productivity, we do not want to waste man-hours on strikes. Thus peaceful labor-management relations are important for the most effective utilization of human resources. Good working conditions also affect productivity, as do the hours of work. Failure to utilize manpower effectively results, furthermore, from discrimination against minorities in hiring and training.

Welfare

Human capital is different from other kinds of capital in that it requires constant maintenance. The human being is not just a factor of production but the main reason for the existence of the entire economic system. It is the purpose of this system to enhance the human being's welfare. Manpower planners must particularly look after the welfare of the workers, since others are farther removed from their problems and thus do not see them.

Incentives

People will train and educate themselves in order to attain money and prestige, which are often synonymous. However, cultural attitudes toward various jobs may also serve to attract people to some jobs while avoiding others. It is the manpower administrator's responsibility to recognize the best incentives for a given society and to manipulate them as required by the situation.

Statistics

While projections into the future have a value, we should not forget that we might die now while looking at the difficulties of the future. We must know the facts as they are today in order to meet present needs as well as prescribe measures to attain future goals. For this we need substantial statistics. These must constantly be refined in order to keep them abreast of the purposes for which they are to be used.

Organizations

This seems to be the area where the Agency for International Development can help developing countries most effectively. Many countries do not have the necessary institutions for the distribution and utilization of manpower. Former colonies suffer acutely from this problem because the colonizing country generally provided services and administrators from the home country. When colonization ended, the former colonies were suddenly faced with having to develop an entire administrative apparatus.

A summary view of the objectives of an active manpower and employment policy is as follows:

POLICIES AND PROGRAMS	RESULTS
Reduce structural unemployment Expand employment levels	Full employment
Enhance quality and efficiency of the labor force Achieve decent working conditions	Productive employment
Advance the dignity and freedom of workers by means of fiscal and monetary measures and education, population, and AMEP policies.	Freely chosen employment

ADMINISTRATION AND INSTITUTIONS FOR THE DISTRIBUTION AND UTILIZATION OF MANPOWER II

Burnie Merson

Previous discussions on manpower problems have stressed the importance of a conceptual framework for manpower policy-making. Once policy and plans have been established, however, the institutional and administrative structure of a country is needed to systematically put them into effect.

IMPLEMENTING AN ACTIVE MANPOWER AND EMPLOYMENT POLICY

The first step in the application of an active manpower and employment policy is a public announcement, on the very highest level, of the government's commitment to that policy. In the United States, commitment began with the Employment Act of 1946, which placed the national resources behind the goal of full employment. The Manpower Development and Training Act later reaffirmed this commitment and provided for an annual report ot the President on manpower. Other countries have committed themselves to an active manpower policy by adopting the International Labor Organization's Convention 122 and the Organization for Economic Cooperation and Development's "Recommendation of the Council on Manpower Policy as a Means for the Promotion of Economic Growth." Some countries have chosen to include the goal fo full employment in their five, 10, or 15 year development plans.

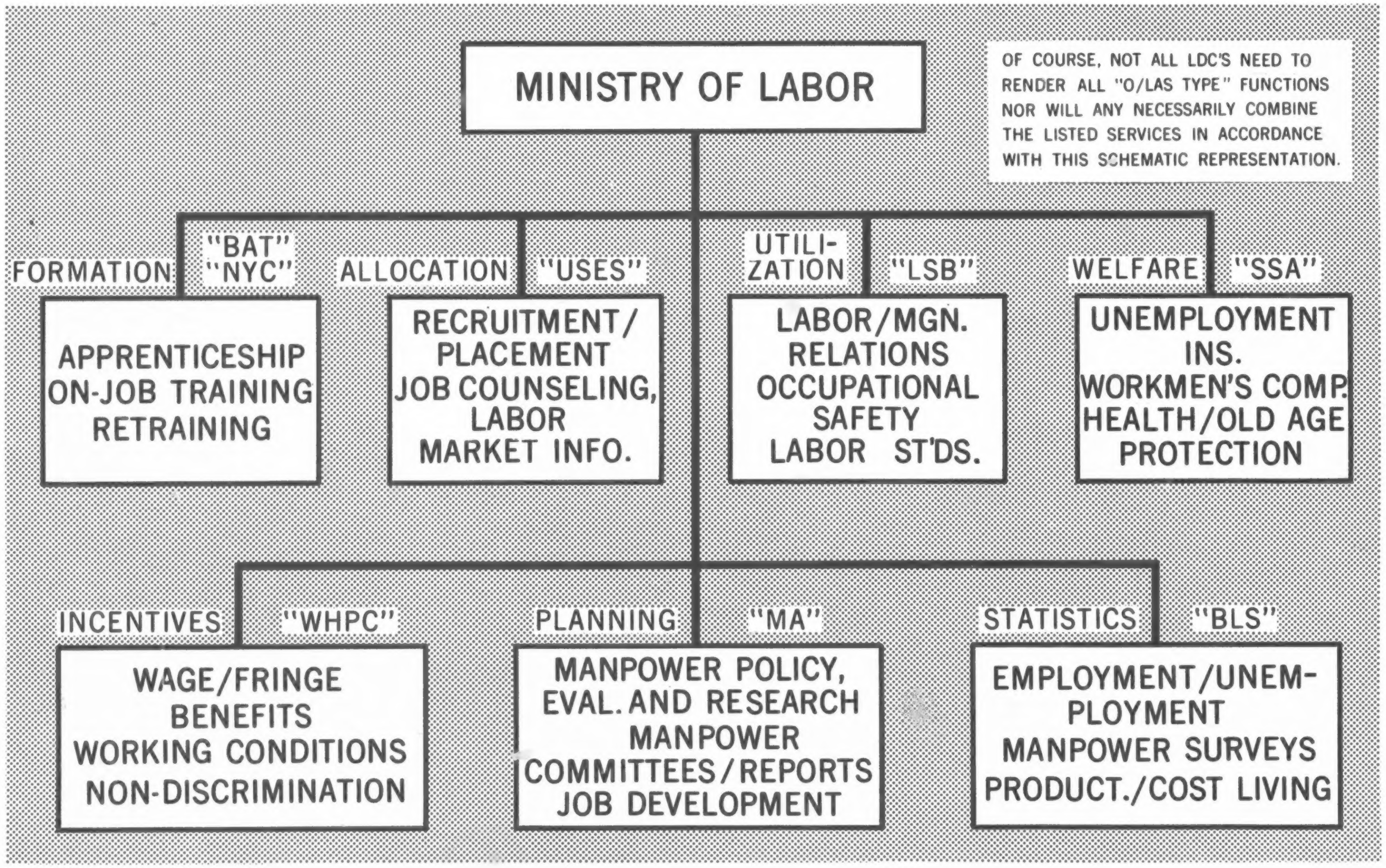
After a government has publicly expressed its manpower objectives, it must furnish the institutions which will work to achieve these objectives. Both the Council of Economic Advisers and the Joint Economic Committee of the United States Congress came into being as a result of the Employment Act of 1946.

The Department of Labor always plays a vital role in the implementation of manpower policy. Graph 19 suggests one possible organization for an effective ministry of labor.

Although the ministry of labor is normally the chief institution for carrying out an active employment policy, it must often share responsibility for manpower programs with other ministries and agencies of the government. In the United States, for example, much of the responsibility for the enforcement of industrial safety legislation and labor standards lies outside the Department of Labor in such agencies as the Federal Aviation Agency, the Bureau of Mines, and the Interstate Commerce Commission. The Department of Health, Education and Welfare and the Social Security Administration are in charge of welfare programs affecting the labor force. In any country, overall responsibility for manpower planning and programs should reside at the highest level of government to insure a coordinated effort.

GRAPH 19

ORGANIZATION OF A MINISTRY OF LABOR


MINISTRY OF LABOR
FORMATION
"BAT"
"NYC"
APPRENTICESHIP
ON-JOB TRAINING
RETRAINING
ALLOCATION
"USES"
RECRUITMENT/
PLACEMENT
JOB COUNSELING,
LABOR
MARKET INFO.
UTILI-
ZATION
"LSB"
LABOR/MGN.
RELATIONS
OCCUPATIONAL
SAFETY
LABOR ST'DS.
WELFARE
"SSA"
UNEMPLOYMENT
INS.
WORKMEN'S COMP.
HEALTH/OLD AGE
PROTECTION
INCENTIVES
"WHPC"
WAGE/FRINGE
BENEFITS
WORKING CONDITIONS
NON-DISCRIMINATION
PLANNING
"MA"
MANPOWER POLICY,
EVAL. AND RESEARCH
MANPOWER
COMMITTEES/REPORTS
JOB DEVELOPMENT
STATISTICS
"BLS"
EMPLOYMENT/UNEMPLOYMENT
MANPOWER SURVEYS
PRODUCT./COST LIVING

OF COURSE, NOT ALL LDC'S NEED TO RENDER ALL "O/LAS TYPE" FUNCTIONS NOR WILL ANY NECESSARILY COMBINE THE LISTED SERVICES IN ACCORDANCE WITH THIS SCHEMATIC REPRESENTATION.

Economic Arguments for Manpower Programs

A manpower administrator who wants to win support for more extensive manpower programs might show how increases in Gross National Product may be the product of effective and comprehensive manpower planning. Rising inputs of manpower as well as larger inputs of capital result in increases in Gross National Product. The manpower administrator may point out that the first of these inputs can be increased by reducing discriminatory employment and by improving training programs, so that a job seeker with inadequate qualifications can be prepared to fill a job vacancy. Manpower planning can contribute to the increased productivity of both the labor and the physical capital inputs in three ways. First, by improving the quality of labor through programs to upgrade skills and achieve good labor-management relations; second, by improving the nation's educational system as well as the climate for research, both of which would encourage advances in technology; third, by establishing wage policies which assure an adequate income to the population and thus help to increase demand.

GRAPH 20

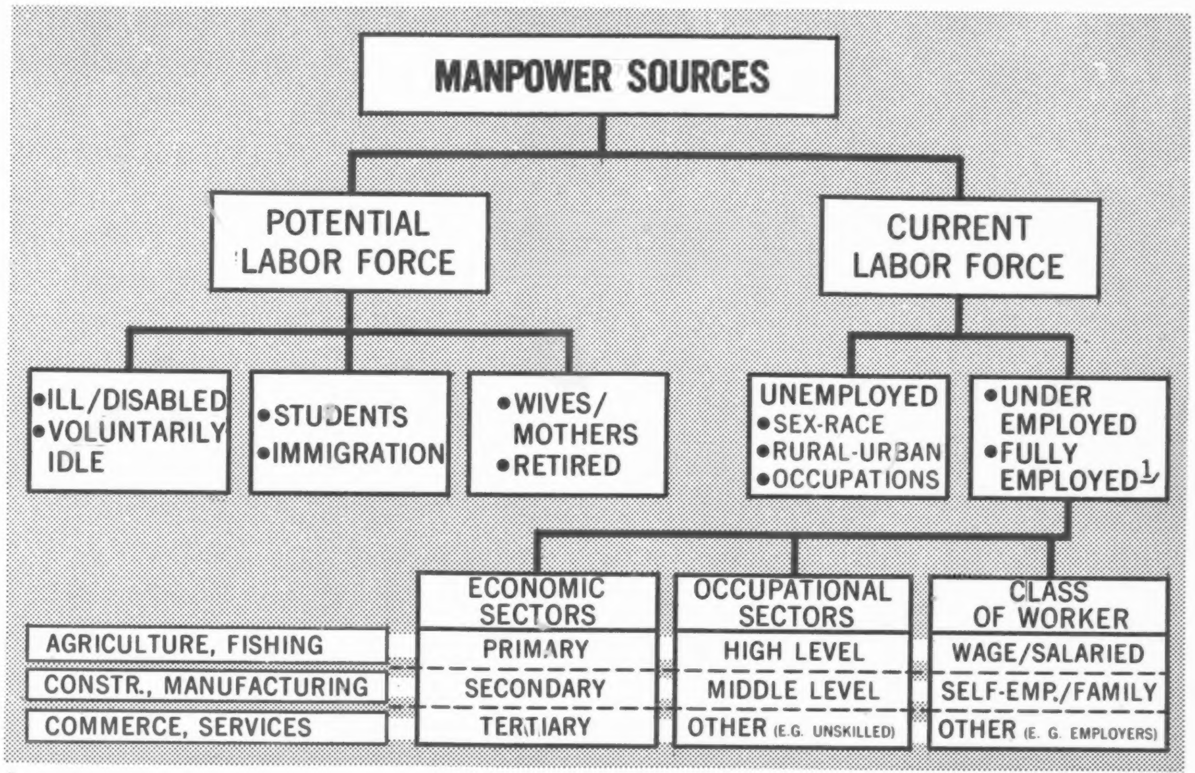
PER CAPITA GNP AFFECTED BY

A. LABOR FORCE PARTICIPATION RATES (PERCENT OF POPULATION IN LABOR FORCE)	● MEN-WOMEN-CHILDREN AT WORK/ SEEKING WORK ● JOB OPPORTUNITIES FOR MINORITIES & HANDICAPPED ● EDUCATIONAL-POPULATION-HEALTH-RETIREMENT POLICIES
B. AVERAGE HOURS WORKED (TOTAL MAN HOURS ÷ LABOR FORCE)	● UNEMPLOYMENT ● UNDEREMPLOYMENT ● LABOR DISPUTES ● ABSENTEEISM ● INDUSTRIAL ACCIDENTS ● WORK WEEK
C. OUTPUT PER HOUR WORKED (PRODUCTIVITY) (PRODUCTION ÷ TOTAL MAN HOURS)	● WORKER SKILLS, KNOWLEDGE, ABILITIES, EFFORTS ● RIGHT MAN IN RIGHT JOB ● LABOR/MANAGEMENT RELATIONS ● GOOD MACHINES, TOOLS, POWER, TRANSPORTATION, ETC.

Graph No. 20 illustrates how manpower programs may also produce changes in the per capita GNP of a country.

A manpower policy which focuses on the improvement and utilization of the current labor force will be more immediately productive than one which directs its efforts mainly towards the potential labor force by improving education. The sources of a country's manpower are shown in graph No. 21.

GRAPH 21


MANPOWER SOURCES
POTENTIAL LABOR FORCE
CURRENT LABOR FORCE
•ILL/DISABLED
•VOLUNTARILY IDLE
•STUDENTS
•IMMIGRATION
•WIVES/ MOTHERS
•RETIRED
UNEMPLOYED
•SEX-RACE
•RURAL-URBAN
•OCCUPATIONS
•UNDER EMPLOYED
•FULLY EMPLOYED1/
ECONOMIC SECTORS
PRIMARY
SECONDARY
TERTIARY
OCCUPATIONAL SECTORS
HIGH LEVEL
MIDDLE LEVEL
OTHER (E.G. UNSKILLED)
CLASS OF WORKER
WAGE/SALARIED
SELF-EMP./FAMILY
OTHER (E. G. EMPLOYERS)
AGRICULTURE, FISHING
CONSTR., MANUFACTURING
COMMERCE, SERVICES

1/ PRODUCERS OF GNP; FAMILY BREADWINNERS

In the final analysis, the attainment of a country's development goals, which normally include full, productive, and freely chosen employment, requires the commitment of the nation's human, physical, and institutional resources. While difficulties arise in measuring each of these, institutional resources are perhaps the most elusive of the three. An institution's influence and importance may be entirely out of proportion to its physical plant. Morale, a major factor, is equally difficult to quantify.

Seminar participants during a session.

On November 23, 1966, the Secretary of Labor held a reception for the participants of the IMI Seminar.

Secretary Wirtz talks to one of his guests.

PART TWO

MANPOWER POLICIES AND PROGRAMS IN THE UNITED STATES

3

Part Two

MANPOWER POLICIES AND PROGRAMS IN THE UNITED STATES

Approximately three weeks of the Seminar (October 24 to November 10) were devoted to acquainting the participants with manpower policies and programs in the United States and allowing them to observe U.S. institutions in action. Lectures and a field trip were incorporated into this program, directed by Raphael Brown.

In preparation for the field trip, several government officials gave the Seminar members a broad background of the manpower situation in the United States and of some of the important institutions involved in making manpower policies. On their return, Seminar members heard additional speakers and were given the opportunity to pursue questions of special interest further by having individual appointments made for them.

For the sake of convenience in travel, and to accommodate divergent language groups, different field trip itineraries were followed for Spanish and English speaking Seminar members. The former traveled to Atlanta, Georgia, and San Antonio, Texas, whereas the English speaking group went to Houston, Texas, and Kansas City, Missouri. The two groups met at the third stop which was Knoxville, Tennessee. From there they returned to Washington, D.C. Messrs. Raphael Brown and David G. Jaques, of the U.S. Department of Labor, accompanied the Spanish speaking group, which also included two interpreters. The English speaking group traveled under the leadership of Mr. Ealton L. Nelson of the Agency for International Development and Mr. Frank Dischel of the Department of Labor. Each group of participants selected a chairman, who subsequently submitted a report on the respective group's impressions. The chairman of the Spanish group was Alberto R. Fulleda of Colombia, and for the English speaking group, it was Abubakar Usman of Nigeria.

A. GENERAL ORIENTATION

INTRODUCTION

Part Two of the Seminar Proceedings are introduced by Mr. Stanley H. Ruttenberg. He describes some of the reasoning behind U.S. manpower policy, summarizes the activities of the five bureaus within the Labor Department's Manpower Administration responsible for manpower programs, and outlines important current programs aimed at attaining full employment. Among these are efforts to reduce youth unemployment, development programs for Labor surplus areas, and reaching the "hard-core unemployed" by helping them to overcome some of the handicaps that disadvantaged groups face in the labor market. Two of the Manpower Administration's activities mentioned by Mr. Ruttenberg are discussed in greater detail by subsequent speakers. Thus Mr. Murray discusses the Employment Service. He explains the joint Federal/State administration of the Service, as well as the organizational structure, and the responsibilities of the local employment offices. Mr. Eldridge elaborates on the organization of the apprenticeship system in the United States and the activities of the Bureau of Apprenticeship and Training.

Female labor force participation in the United States proved to be of considerable interest to the participants. Thus the Proceedings include contributions by three speakers from the Women's Bureau of the Department of Labor providing the group with information on the functions of the Women's Bureau and statistics about working women.

Mr. Friedman discusses the role played by the AFL-CIO in the distribution and utilization of U.S. manpower. He feels that the Employment Service has not yet been fully accepted in the United States, and that its offices are not used as widely as they should be. He goes on to explain that the manpower functions of industrial and craft unions differ widely. The former are not involved in the hiring process but try to insure job security and manpower development through the collective bargaining process. The craft unions, on the other hand, play an active part in the actual hiring and have developed apprenticeship systems for training purposes. Mr. Henderson makes the last contribution on U.S. manpower policies by summarizing the history of U.S. concern with manpower and pointing out some of the persisting flaws in our policy. He lists some of the nation's current programs but adds that we must go beyond these, particularly if we want to alleviate unemployment and underemployment among the disadvantaged.

MISSION AND FUNCTION OF THE MANPOWER ADMINISTRATION IN THE DEVELOPMENT OF MANPOWER POLICY AND PROGRAMS

Stanley H. Ruttenberg

I would like to welcome all of you to the Seventh International Manpower Seminar. Through an exchange of information and ideas, we may arrive at some solutions to our problems of development and effective utilization of human resources. I am happy to have the opportunity of discussing with you what we are attempting to do in this country in the manpower field and hope that some of our experiences may provide you with examples for developing your own manpower policies and programs. You must remember, however, that our programs are continually changing to meet new problems.

During the past five years, we have been giving special attention in the United States to the better utilization of manpower as a basic resource in economic growth. President Kennedy initiated the intensified emphasis on manpower problems, and President Johnson has continued to consider manpower programs a vital part of U.S. Government policy. The President has expressed the view that the objectives of the Manpower Administration should be geared to three fundamental goals: 1) developing the abilities of our people, 2) creating jobs which make the most of these abilities, and 3) matching jobs and people. In the Manpower Administration, we consider it our major mission to provide leadership for the attainment of these goals. It is the action carried forward in each community that will decide how well we achieve national objectives.

ORGANIZATION OF THE MANPOWER ADMINISTRATION

Meeting the objective of full, productive and freely chosen employment has required some reorganization and regrouping of Federal Government agencies. Within the Manpower Administration there are five main bureaus and offices responsible for manpower programs. They are the Bureau of Employment Security, the Bureau of Apprenticeship and Training, the Neighborhood Youth Corps, the Office of Manpower Policy, Evaluation and Research, and the Office of Financial and Management Services.

The Bureau of Employment Security

Two major manpower programs are assigned to this Bureau--the Public Employment Service and the Unemployment Insurance program. The Federal Government shares the responsibility of these programs with the state governments.

The U.S. Employment Service plays a major role in the operation of our total manpower program. It has more than 2,000 full-time operating offices in nearly as many communities in the country. Research is constantly in progress to improve its main function, that of matching people with jobs. For instance, research in occupations has resulted in a new Dictionary of Occupational Titles containing up-to-date descriptions of more than 23,000 different occupations. Work with the disadvantaged required a complete review of our General Aptitude Test Battery--a system we use to help workers determine their natural aptitudes and to measure their proficiency in certain skills. We are currently developing a non-verbal test battery for application to the educationally disadvantaged. It is our hope that this will help us develop suitable training for potential workers whose educational attainment is unusually low.

The Federal-State Unemployment Insurance System provides cash payments to workers who become unemployed through no fault of their own. The amount paid, and the period for which it is received, is set by state governments and consequently varies from state to state. The Federal Government would like to see unemployment insurance payments approximate 50 percent of the worker's former wages and would prefer that they be paid for a period of at least 26 weeks. Some states meet, or exceed, these standards, but, on the average, weekly benefits paid last year were about 35 to 40 percent of the average weekly wage.

About 30 percent of all non-agricultural wage and salary workers are covered by the Federal-State Unemployment Insurance System; U.S. Government workers, members of the Armed Forces, and railroad workers have separate systems.

The Bureau of Apprenticeship and Training

The American apprenticeship system is based on voluntary cooperation between management, labor, government, and schools. This cooperation is reflected by national "joint apprenticeship committees" which are concerned primarily with developing minimum universal apprenticeship standards for a skilled trade and encouraging local apprenticeship committees to accept these standards as a guide. The Bureau of Apprenticeship and Training also administers a program of industrial training for foreign nationals who come to the United States under U.S. Government sponsorship.

The Neighborhood Youth Corps

The Neighborhood Youth Corps, which is administered by the Manpower Administration, is a work-experience program for young people between the ages of 16 and 21 who come from homes with incomes of less than $3,000 a year. It aims at providing any services that will increase the employability of youngsters in need.

The Office of Manpower Policy, Evaluation, and Research

Since the enactment of the Manpower Development and Training Program of 1962, this Office has been responsible for the annual Manpower Report of the President, which has become the major manpower document of the U.S. It enunciates our manpower policy, reviews current manpower developments, outlines major problems, and recommends action for their solution. The President's Manpower Report represents the consensus of the entire Executive Branch of our Government.

The dynamic and changing programs in the manpower field require continual evaluation if we are to accomplish our national objectives. OMPER has been charged with reviewing these programs to see that they meet the goals established for them. It must constantly be sensitive to the impact of automation and technological progress, as well as other structural economic changes on the nation's human resources. OMPER also coordinates nation-wide research programs needed for evolving manpower and program planning policies and administers funds to encourage manpower research in colleges and universities.

The Office of Financial and Management Services

The programs of the Manpower Administration cost in excess of one billion dollars. In supervising the allocation and control of these funds, the Assistant Secretary for Manpower is aided by the Office of Financial and Management Services.

PROGRAMS FOR ATTAINING THE GOAL OF FULL EMPLOYMENT

Our manpower problems are brought about by structural changes in our society, and, although we welcome the changes, they all have economic and social consequences that affect each segment of society. In the past few years, we have made significant progress in reducing the rate of unemployment, but, in spite of these, we continue to be plagued with two and one-half million unemployed. We have difficulty bridging the gap between school and employment for young people; we are faced with the pressure of migration of underutilized manpower, located particularly in our urban slums and rural areas; and we still have many disadvantaged groups as the hard-core of the unemployed. Underlying all of these problems has long been the inadequacy of educational opportunities for many.

One of our major manpower problems has been created by the great wave of teenagers who have entered the labor force in recent years. In 1965, 550,000 of these youngsters entered the civilian labor force, accounting for 40 percent of our labor force growth in that year. Because we had programs designed especially to provide employment for youngsters, we were able to reduce the rate of unemployment among teenagers during that year. In spite of this reduction (from 14.7 to 13.6 percent), unemployment continued at an unacceptable level. We have initiated a number of new, dynamic programs designed to alleviate the explosive problem of jobless youths. We believe, however, that the long-run solution to the interlocking problems of youth unemployment, lack of education, and poverty may be found in recent educational legislation.

American agriculture has been a source of some of our nation's greatest economic and social achievements. Our agricultural output not only supplies most of the food and fiber needed by our expanding population but helps to feed and clothe people all over the world.

Despite dramatic advancements made in this sector of our economy, some of our farm people continue to face severe problems of underemployment and poverty. Many travel from area to area to obtain enough work for a livelihood, and many have left their homes to seek a new life in urban areas. This mass migration has not only left stagnating rural communities but has intensified the problems of overcrowded slum areas in many of our larger cities. Considerable research is being concentrated on this problem. An Economic Development Administration has been established to stimulate the relocation of industries in labor surplus areas and provide jobs for unemployed or underemployed rural workers. We are far from having a solution to the problems of rural-urban migration, but several of our programs are giving particular attention to providing opportunities for these people.

We are vitally concerned with the cost to our economy and society of the hard-core unemployed. These are the people who are at the heart of our problems of poverty. Prolonged unemployment destroys the fabric of a man's life--he withdraws from society. Accompanying it are the additional problems of poor housing, nutrition and health, inadequate medical care, delinquency, and crime. A number of programs in the "war on poverty" and in the manpower field are focused on overcoming the handicaps that the disadvantaged face in entering the labor force. We believe that a job is a minimal requirement for meaningful participation in society, for a man or woman who is head of a household.

In conclusion, I should like to point out that we give so much emphasis to our manpower policy because we are convinced that we cannot attain the fullest measure of economic growth without having achieved full, productive, and freely chosen employment. Our manpower policy should lead us to a society in which every person has full opportunity to develop his or her earning power, where no willing worker lacks a job, and where no useful talent lacks an opportunity. We believe that full employment is needed if we are to achieve the economic growth rate to which we have become jointly committed with many other countries.

THE EMPLOYMENT SERVICE

John T. Murray

The United States Employment Service is one of the basic institutions in this country for implementing manpower plans and programs. Responsibility for administration and operation of the public employment service and related manpower programs is shared by the Federal and state governments. The Federal government establishes policies, sets standards, evaluates programs, and defrays the total cost of operations. The state governments are responsible for direct administration and supervision of the operating programs within each state.

The Federal Bureau of Employment Security has 11 regional offices in the country which serve as liaison offices with the 54 jurisdictions, which operate public employment services. The 54 jurisdictions comprise the 50 states plus Puerto Rico, the Virgin Islands, Guam and the District of Columbia.

Each jurisdiction may have a number of area or district offices (for larger labor areas) and local employment offices (for smaller areas). In total there are over 2,100 offices in full-time operation. These offices, in turn, provide part-time or occasional manpower services to about 2,000 other communities, as needed.

The basic goal of a public employment service is to match men and jobs. Our aim is to do a selective placement job, matching the best qualified worker with the requirements of the job opening. This calls for a range of services such as vocational counseling and guidance service, psychometric tests to help determine natural aptitudes, occupational information, and a wide range of labor information for both administration and operating purposes. Services are also provided to assist those with special problems to enter gainful employment. These services are needed to place, successfully, workers with handicaps, older workers, professional workers, and members of minority groups.

Increasing problems in placing youth in jobs led us to the establishment of special youth offices in about 140 of our major cities. These are known as Youth Opportunity Centers and are designed to overcome the barriers that prevent youth from entering the labor force. In these offices, more intensive services are available for youth than those provided the rest of the labor force in regular local employment offices.

With its network of offices in local communities, it was natural that responsibility for some aspects of other manpower and human resources development programs should be placed in the public employment service. Thus, local employment offices have responsibility for determining training needs, recruiting unemployed workers for skill training programs, and locating youths who would benefit from the Job Corps and the Neighborhood Youth Corps.

THE BUREAU OF APPRENTICESHIP AND TRAINING

Clarence L. Eldridge

The Bureau of Apprenticeship and Training is a Federal Government organization which works closely with state-administered boards of apprenticeship and training. Its origin dates back to the Fitzgerald Apprenticeship Act of 1937. This Act also created the Federal Committee on Apprenticeship, composed of six representatives from management, six from labor, and one from the public sector. The latter is generally the Federal Director of Vocational Education. The Federal Committee advises the Bureau of Apprenticeship and Training. There are 10 regional offices, 50 state offices, and 175 local offices under the Bureau.

The field staff is relatively small--370 people service the needs of all industry. It is the task of the field man to go into the communities and set up local apprenticeship and training committees with the goal of bringing together labor and management in various trades. There are approximately 10,000 local joint apprenticeship and training committees with two representatives from labor, two from management, and one public representative (usually a local school superintendent or one of his appointees). All serve on the committees on a voluntary basis.

Today, the increased demand for highly skilled workers has resulted in a large scale multi-faceted approach to the development of training programs. In the United States, the on-the-job training, apprenticeship approach is still proving to be the most successful from a result point of view. It has advantages which, according to critics, are lacking in the vocational trade school approach. Some of these are 1) the financial impossibility of equipping schools with the latest technological machinery used in rapid industry development, 2) the inability to simulate actual job conditions and responsibilities within the school shop training program, 3) many students find it difficult, if not impossible, to attend school full-time at the expense of foregoing all earnings. The combination of vocational, pre-apprenticeship training in school and subsequent on-the-job training supplemented with related vocational training is proving successful.

In some instances, persons work full-time and attend evening courses for related training. The local joint apprenticeship and training committee checks up on the trainees' progress. If a class is missed for reasons other than health, the trainee is told not to report for work the next day and loses his pay for that period. This discourages absenteeism from evening classes.

The duration of the training program varies. Service trades, such as barbers and bakers, require only two years of on-the-job training. Construction and metal workers' trades average four years of training; brick layers, three years; electricians, four to five years; and graphic arts, the longest, is six years. The time element is geared to the average individual. Wages are based on the journeyman's scale. For the first six months of training, the trainee receives 50 percent of the journeyman's wage. This is gradually increased so that by the end of the training period, he receives full pay. The instructor is generally from the trade or industry and knows how to deal with unions and management.

Though on-the-job experience has proved superior to that provided solely in schools, local joint apprenticeship and training committees encounter various problems in selling the program. For example, small companies fear the cost element.

THE WOMEN'S BUREAU

Mrs. Marguerite I. Gilmore, Mrs. June Wakeford,
and Mrs. Isabelle S. Streidl

ACTIVITIES OF THE WOMEN'S BUREAU

The Women's Bureau is a Federal agency dedicated to serving the interests of all women, as wage earners, citizens, homemakers, and volunteers. One of its functions is to serve as a clearing-house of statistical information on women in the labor force. Since the staff of the Women's Bureau is small, this agency conducts very little primary research and depends mainly on data obtained by other branches of the Government such as the Current Population Surveys made monthly by the Department of Commerce, the decennial census produced by the Bureau of the Census, statistics on education from the Office of Education of the Department of Health, Education and Welfare, and the industry-wage surveys for the Bureau of Labor Statistics. The Women's Bureau occasionally funds special research projects of particular interest to women.

The Handbook on Women Workers, the principal publication of the Women's Bureau, brings together the various pieces of information about women workers available from both government and private sources. The Handbook includes information on the number of women in the labor force, their characteristics such as age, marital status and educational attainment, their occupations, their earnings, etc. It also contains information on legislation and standards affecting the employment of women.

WOMEN IN THE LABOR FORCE

In the United States, 51 percent of the population, and one-third of the labor force is female. Many of these women are employed in low-level positions. The Women's Bureau not only seeks to end discrimination against women in professional schools and in public office, but also tries to encourage universities to hire women professors, law firms to open doors to women, etc., and advocates legislation regarding wages and hours. Federal laws governing the more skilled manufacturing or office jobs frequently do not reach women (or men) in low-level service-type jobs. The Women's Bureau has worked to secure legislation providing equal opportunity for women in choice of job and amount of pay. Some examples are the 1964 Equal Pay Amendment providing equal pay for equal work and the Equal Employment Opportunity Act which prohibits private agencies and employers from discriminating with regard to sex, race, religion, etc.

One of every 10 families is headed by a woman in the United States. The Women's Bureau also aims at making these women informed consumers and tries to improve facilities for day-care services for young children. These women must work to support their familes, and every effort must be made to see that their children are not neglected.

Among married women, statistics also seem to indicate that most women work because of financial necessity. Thirty-nine percent of the women whose husbands earn between $3,000 and $5,000 work, but only 25 percent of the women whose husbands earn $10,000 or over.

Studies have shown that there is relatively little connection between juvenile delinquency and the fact that a mother works. A family's relationship usually depends more on the personalities of the parents than on whether or not the mother works. In some cases children fare better with a working mother since they receive more concentrated and individual attention during the hours when she is able to be with them.

The Government maintains training programs in which women may participate through the Job Corps, the Neighborhood Youth Corps, and under the provisions of the Manpower Development and Training Act. Many of the young women participating in the Neighborhood Youth Corps do library and secretarial work while continuing to live with their families. Under the auspices of the MDTA, courses are typically offered in clerical skills, practical nursing, and sales work. In addition, the Act provides for on-the-job training (for stitchers, sewers, etc.), for the education of service workers such as nurses aides, and some refresher courses for professional nurses.

The only program in which the training for women is separated from that of men is the Women's Job Corps which now has about 4,500 women in its residential centers and hopes to have 9,000 by July 1967. The Job Corps works on the premise that young people can be trained better and more easily if they are removed from a poor home environment. Instructors for these training programs are chosen primarily on the basis of aptitude tests. No distinction is made between men and women.

In the United States the typical woman works for several years after finishing school, leaves the labor force after marriage to assume child-raising responsibilities, but returns to the labor force after her children are grown or reach school age. The median age at which a woman has her last child is 30 years. Thus she has about 30 to 35 years of active life remaining after her last child enters school. The working patterns of women differ considerably from those of men. Women are much more likely to work part-time or part-year.

ORGANIZED LABOR AND MANPOWER POLICIES

Marvin Friedman

ATTITUDES TOWARD GOVERNMENT POLICIES

The American Federation of Labor and the Congress of Industrial Organization (AFL-CIO) takes great interest in manpower programs, as it is not only concerned with its members' needs but also with the needs of society as a whole. The trade union movement has become involved in various facets of manpower. Its influence is felt in the U.S. Employment Service, in the support of federal legislation, and in the protection of the rights of workers.

The Employment Service is relied upon to match people and jobs, but the unions feel that it is not functioning as effectively as it should. It is not yet fully accepted in the United States, nor are its offices used as widely as they should be. The trade unions see the problem as one of Federal/State relationships. In practice, there are 50 different employment services operated by the states with money provided by the Federal Government. But the Employment Service is confronted with other problems. For instance, many employers are hostile toward it. They do not like the Government to have a hand in this kind of activity and thus do not list their job openings. Another practical problem which limits the Service's effectiveness is that it grew up during the depression and was known originally as the Unemployment Service. Thus it is widely felt that people who go there to look for jobs are only those who have exhausted all other possibilities. Many employers tend to use private fee-charging agencies, instead of the public employment services.

The unions hope that the U.S. Employment Service will strengthen its role in the manpower field, and that, eventually, employment offices will become true manpower centers. They feel that the entire Employment Service system needs to be attuned to overall national manpower policies. They are also of the opinion that the Service should be organized on the basis of labor market areas rather than being run from each state capital.

Organized labor strongly favors programs developed under the Manpower Development and Training Act (MDTA), through which training is now provided in occupations where manpower shortages exist. It represents the first time that the Federal Government has moved so fully into the manpower field during peacetime. Its previous interests had all been very limited. The Government has also increased its role in other areas of training. Since 1963, increased aid has been given, for instance, for vocational education to the states. Recently, the Government also provided aid for elementary and secondary schools to improve basic education in general. Traditionally, there has been a great resistance in the United States to Federal Government interference in local education. The trade unions have actively supported legislation designed to advance education.

TRADE UNION POLICIES

One of the main objectives of the trade union movement is to maximize job security. This can be done by aggressively supporting policies that contribute to economic growth and, in turn, to the creation of job opportunities. The unions have also placed great emphasis on seniority provisions in collective agreements. These insure that in case of layoff the last man in is the first man out, and advancement is related to years of service.

There are two groups of unions in the United States--those organized by industry and those organized by craft. Although craft unions and industrial unions agree on national economic policies, they differ in specific interests and activities. Industrial unions have little to say about who is hired. The employer accepts whomever he wishes, and the individual becomes covered by the existing collective agreement after he starts his job. Usually he is a permanent employee. Manpower development becomes part of collective bargaining since the unions see to it that the employer trains and retrains workers already on the job, instead of going outside the firm to hire people.

The craft unions play an entirely different role with respect to manpower. They developed to serve the needs of workers who may be employed by many small firms during the course of any one year. Often such employers need highly skilled people quickly and for a limited period of time. Thus, they tend to rely upon the unions in order to get manpower.

Craft unions also perform different functions with respect to training. With a fluctuating workload and frequent labor turnover in such industries as construction, for instance, developing a supply of skilled manpower presents problems. Thus the trade unions have been active in developing apprenticeship programs which provide the degree of training flexibility needed to conform with actual employment practices. The apprentice usually signs an agreement with a local joint labor-management apprenticeship and training committee instead of with an employer. This committee supervises the progress of the apprentice and sees that he gets a diversity of work experience, even though he may work for a number of different employers.

MANPOWER IN THE UNITED STATES

Vivian Henderson

THE DEVELOPMENT OF A UNITED STATES MANPOWER POLICY

Manpower planning is a post-World War II concept for the United States. During the war, we began to realize that long-range economic planning with respect to capital and natural resources was not only desirable but mandatory, and directly related to growth. The idea of planning and developing human resources was accepted more slowly. For example, even in the Employment Act of 1946 manpower planning was only implied, not specifically mentioned, as an area for policy concern.

One of the pioneers in the idea of manpower planning was Professor Eli Ginzberg of Columbia University who, while employed by the War Department during World War II, became concerned with the problem of men who did not qualify for the armed forces. Partially as a result of Professor Ginzberg's research, we have come to recognize that a normally functioning, competitive labor market does not guarantee that the supply of manpower will match the demand. As a result, we realize the need for an active manpower policy.

The concept of a "national" manpower policy is even newer in our thinking. In fact, we still do not have such a national policy. Fragmented units are responsible for our various manpower policies. What we need now is to define manpower policies in terms of national objectives. We still rely on local school districts and state and local governments for developing our manpower programs and policies. Reliance on local units is not bad, in principle, but these units should operate only within the framework of a national policy. Local programs, however, tend to be geared to local markets only. In the United States, geographic mobility, and thus labor market mobility, are a sign of the times. Yet vocational education is usually locally oriented. For example, a Negro who migrates from Texas to Los Angeles will face a different labor market for which he may not be prepared. We have not moved as rapidly as we should in solving the modern problems of training a mobile labor force.

Although we never made pronouncements regarding manpower policies in the past, we did not completely ignore manpower. The Morrill Land Grant Act of 1862 encouraged the establishment of state colleges for teaching "such branches of learning as are related to agriculture and mechanical arts and to promote liberal and practical education of industrial classes." The Smith Hughes Act of 1917 provided Federal aid for vocational education in the public high schools. Our immigration policies have also had manpower objectives, bringing to this country craftsmen and skilled workers.

We are beginning to see the need for comprehensive, long-range human resources programs and the problems of human adjustment to change. We have come to sense the relationship between manpower policy and programs, and social ills, such as poverty. We used to think people were poor because they were lazy. Now we know that there are direct relationships between manpower programs and the extent to which people are and stay poor.

CURRENT PROGRAMS

Conventional manpower programs and policies in the United States are built around the following:

1) The strengthening of secondary and elementary education, particularly the former.

2) Specific programs of career counseling and vocational guidance.

3) Equal opportunities to acquire skills.

4) Improving facilities for, and methods of, training.

5) Increasing knowledge about the nation's manpower resources.

These conventional goals require cooperation with schools, employers, organized labor, government, volunteer groups, and the armed forces.

FUTURE PROGRAMS

We must go beyond the issues associated with the education and training of our human resources, however. Since 1957, there have been more people employed in white-collar and skilled occupations than in blue-collar unskilled occupations and more in service industries than in goods-producing industries. We have gone from an industrial age to the age of cybernetics. While we are concerned with the development aspects of manpower, i.e. education and training, our future policy in the United States must emphasize the utilization of manpower. The neglect of proper manpower utilization is the problem of our ghettos.

How should we proceed? Our unstructured, fragmented training programs must be united in order to bring more people into the labor force, and jobs must be analyzed to see that the qualifications required of an applicant are not higher than necessary. At present, eight percent of the Negroes in the labor force are unemployed, and, if one includes those who are not counted because they have given up looking for work and are thus not considered part of the labor force, the Negro unemployment rate is almost 15 percent. This rate is substantially worse among the young. If these figures are projected to 1975, it is possible that Negro unemployment will be 15 percent of those in the labor force and 25 percent of the Negro population of working age. The Negroes are only one example of the 35 million poor people in the United States.

One of the problems is that we are slaves to credentials. When labor is plentiful, employers insist on high credentials. In a tight labor market, they lower their standards and restructure jobs. Why can they not do this all the time? We need a system that will allow people to upgrade themselves while working. Only by emphasizing the proper utilization of labor will we be able to achieve full employment.

Mr. Ruttenberg addresses the Seminar on U.S. manpower problems and policies.

Mr. Henderson shares an amusing story.

B. THE FIELD TRIP

To supplement studies and discussions in the Seminar, participants were given the opportunity to see first hand, institutions concerned with manpower development and utilization in a number of U.S. cities. The Bureau of Employment Security, which has responsibility for the public employment services, the Bureau of Apprenticeship and Training, and the Women's Bureau contributed towards arranging a balanced inspection of programs and organizations.

Four major points were stressed throughout the field trip. One was that U.S. manpower programs are dependent on close collaboration between Federal, state, county, and local governments as well as among various institutions. These cooperate to supply current manpower demands through training and the upgrading of skills, to project tomorrow's needs, and to establish programs to meet them. In every city visited, the participants found that boards of education, employment services, and apprenticeship councils sit down with representatives of the private sector to lay out short-range and long-range programs. Secondly, the role of the agriculture sector was emphasized. New techniques, new equipment, and new outlooks on the part of the farmers are required on the modern farm in order to feed the rapidly growing urban communities. Simultaneously, new skills are also needed.

The development of the service sector of the U.S. economy was another aspect which received emphasis during the field trip. Here again the participants were made aware of considerable planning and training for present as well as future needs. They were impressed by the close relationship that exists between the demands of local and regional labor markets and the types of training they were able to observe in both formal educational systems and specialized local vocational training centers. Finally, an effort was made to point out U.S. concern with providing employment for persons who are at a disadvantage in the labor market. In each community there were programs (some Federally financed, some state or locally financed, or a combination of both) to train or rehabilitate older workers, handicapped people, school dropouts, etc. Seminar members were told that state and Federal governments actually save money through the latter programs, since they are able to collect taxes from employed graduates who might otherwise be dependent on welfare payments.

For the Spanish speaking group, the field trip began with a visit to the Atlanta Regional Offices of the Department of Labor. Here the participants were told about state-wide programs including activities relating to employment services, unemployment insurance, the role of women in the labor force, apprenticeship training, and regional economic development projects. This was followed by a visit to the Atlanta Office of the U.S. Employment Service where the participants were introduced to procedures followed in placing job applicants. The four offices of the Employment Service were specialized in filling industrial, commercial, professional, and service vacancies. Each made a presentation of the principal problems encountered in its activities.

The following day, the group visited the installations of the Lockheed Aircraft Company in Marietta, Georgia, which employs 25,000 people. At Lockheed they found close cooperation with the public employment service in the recruitment of personnel. The company also employs its own highly trained staff, however, to analyze personnel needs at different levels and to study job applications referred by the Employment Service. Lockheed carries on extensive training programs, among which are those for career development, technicians, and engineers. Lockheed also participates in apprenticeship programs which are highly regarded by the community and the Company. Seminar members expressed surprise at the quantity and quality of the training conducted by Lockheed. They found that the variety of programs was possible because of close cooperation between such widely different institutions as the Atlanta School Board, local labor and management organizations, and various state and Federal services.

On the third day in Atlanta, Seminar participants were introduced to different aptitude and ability tests used by the U.S. Employment Service to determine the qualifications of job applicants. They also visited a Youth Opportunity Center and listened to explanations of the Center's objectives. They were told that Centers are organized to help young people who have dropped out of school or have special problems that prevent them from finding work or preparing themselves for jobs. Youngsters are given guidance and help in finding full-time or part-time jobs.

The participants also observed MDTA-supported courses given in a local technical school. These were designed to improve the employability of people of all ages. A study conducted by this school had shown that the Federal Government's expenditures for training are amply repaid through taxes collected from the earnings of former trainees. Courses taught include the servicing of TV's, radios, and refrigerators; tin working; mechanical drawing; mechanics and electricity. Each course is divided into three parts. The first part involves instruction in communication. It includes English composition and simple mathematics. The second part consists of technical theory, and the third provides actual practice in factory work.

From Atlanta, the group proceeded to San Antonio, Texas, where the members had an opportunity to inspect the rural sector of the region. Guided by an official of the Agricultural Manpower Section of the Employment Service, they toured a farm specializing in the production of vegetables. The farm used a semi-mechanized packing process.

On the second day in San Antonio, Seminar members visited another training school. They expressed great interest in the fact that this school concentrated on subjects related to the local labor market--the skills which could be used in farming and in the aeronautical and military industries in the region. To supplement their experiences at vocational training schools, the participants were conducted through a regular high school. Here they found academic and vocational instruction side by side. With respect to the latter, the high school also emphasized training to meet the demands of the local labor market.

A subsequent trip to the Apprenticeship School for Construction Plumbers helped to clarify the operation of the U.S. apprenticeship system. The group discovered that the school is dependent for its support on trade unions, management organizations, and the local government.

On the last day in San Antonio, Seminar members paid a formal visit to the Mayor of the city. There they were told about the city manager administrative system by which San Antonio is governed. They met several elected officers of Mexican origin who explained city affairs in Spanish.

Houston, Texas was the first stop on the itinerary of the English speaking group. Seminar members found Houston to be one of the original five cities selected for pilot projects under the Department of Labor's Human Resources Development Program. This Program involves a door-to-door survey of selected census tracts (eight in Houston) which are heavily populated and in which the annual family income is $3,000 or less. The ultimate objective of the Program is to achieve full employment in the respective cities. In Houston, it began operations in April 1966.

The Human Resources Development Program is a joint venture of Federal and local government agencies, and private local organizations concerned with social and economic welfare. Persons who appear in need are asked to report to neighborhood outposts where their particular problems are analyzed. From there, they are referred to appropriate agencies, either for further counselling, to make contact with an employer, or to receive a service which will increase their employability. All of the person's needs are taken into consideration--physical handicaps, psychological problems, educational shortcomings, the need for nursery care for small children, etc. Local employers have been canvassed and encouraged to cooperate with the Program in making jobs available to these unemployed. An attempt is made to reach every person over age 16 in the respective census tracts.

The group subsequently visited the Houston District Office of the U.S. Employment Service. They found specialized facilities for different types of skill, as well as a Youth Opportunity Center which serves young people unable to compete in the labor market. The group visited some of these specialized offices and observed them in operation. The participants found that Employment Service offices are not only concerned with job placements or the payment of unemployment claims. They also refer job applicants for remedial help such as health services or for training.

Several MDTA training centers were visited. Among them were those providing training in television and radio repairs, shoe repair, welding, and secretarial skills.

From Houston, the English speaking participants traveled to Kansas City, Missouri, where their first visit was to the regional office of the U.S. Bureau of Employment Security. A subsequent visit to the University of Missouri in Kansas City offered the group an opportunity to observe how universities participate actively in government programs. They found the Human Resources Center of the University engaged in a study on the employment of women. The research is intended to improve employment opportunities for women, particularly those who reenter the labor force after the child-bearing and child-rearing period.

The participants also met with two private organizations which have contracts with the Government for on-the-job training schemes--i.e. the Urban League and the Jewish Vocational Training Center. They were informed that the Federal Government pays $240 for each trainee who completes a course. This came as a surprise to Seminar members who found it unusual that the U.S. Government would contract with private institutions. They were assured that such arrangements had worked out exceedingly well.

An opportunity to learn about the workings of apprenticeship programs was afforded by a meeting with the National Association of General Contractors. The Association has 600 member firms of contractors, sub-contractors, and suppliers. Apprentices are not recruited directly by the contractor. This is done by the local Joint Apprenticeship and Training Committee which also assigns him. If the Committee feels that the apprentice is not receiving proper training, it may reassign him.

In Kansas City, as in Houston, a visit was paid to an MDTA training center, where the group observed instructions in automobile, coin machine, and sewing machine repairing. They were particularly interested in a program referred to as "recall education." Classes in these courses were predominately made up of middle-aged persons who have had about six years of formal schooling but have made little use of their education since leaving school. In this program they are helped to recall their former knowledge before being sent on for further occupational training.

The last stop for both English and Spanish speaking participants was in Knoxville, Tennessee where the program focused on the Tennessee Valley Authority. The participants were greatly interested in the TVA's employment policy which they found to be independent both of the Civil Service Commission and the U.S. Employment Service.

PART THREE

PROJECT AURORA-- A CASE STUDY IN MANPOWER PLANNING

Part Three

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A. PURPOSE AND PROCEDURE

Project Aurora represented a group case study in which Seminar participants were expected to act as "manpower advisors" to a fictitious country. This country, named Aurora, was intended to illustrate many of the human resources and other problems common to developing nations. Seminar members were provided with a description of some of the basic characteristics of the country as well as essential statistical materials. They were asked to review the existing information, which included a manpower plan drawn up for the nation by Auroran officials. Subsequently, they were expected to analyze the problems inherent in the given situation in order to make recommendations for changes or for developing a more satisfactory plan.

In the course of analyzing the country's problems, the "manpower advisors" were expected to raise a number of issues which they thought would have to be resolved for the sake of improved economic conditions. It was hoped that some consensus would be reached among the different groups regarding the best manpower course for Aurora, but the staff of the International Manpower Institute did not provide an "official solution."

Since the project was not intended as technician training but rather to sharpen competence in policy and program planning, Seminar members were expected to do only a minimum of actual calculation in connection with statistical data and projections. Emphasis was placed on broad plans and program development, the major elements of which were 1) diagnosis of problems, 2) procedures for alleviating these problems, 3) an examination of the proper administrative structure for planning, and 4) evolving a final manpower plan.

Step number one was conceived of as an analysis and evaluation of the basic information available on such categories as population, labor force, and manpower supply and needs. This phase was to include a critique of available statistics and analysis of essential information that was lacking, as well as a review of the strong and weak points of the existing Auroran development plan.

Step number two was to include the development of a program of job creation including a special program for rural unemployment and a comprehensive and moderately detailed plan for maximizing productive employment on a short-range and long-range basis. The development of a program for improving or changing the quality of the labor supply in terms of present and future demand was to be included in long-range planning. Attention was to be given to the various possibilities of training outside the formal education system. It was expected that the importance of integrating economic planning, manpower planning, and educational planning would be given attention in this phase of the case study.

In step three of the project, the Auroran "manpower advisors" were expected to examine the organizational and administrative structure to determine where and how the plan could best be administered. They were asked to give consideration to the problems inherent in reorganizing the existing institutions, in order to attain more effective execution of the programs, or in establishing new institutions.

A general manpower plan was to be evolved as the fourth, and last, step of the exercise. Here the various elements were to be balanced or, where no consensus could be reached, "alternative solutions" were to be recorded. It was hoped that some consideration would be given to the extent to which central manpower planning is desirable.

IMI staff participation was limited to providing the above mentioned guidelines for the work sessions as well as to raise a number of major issues which were thought to merit discussion under each phase. The staff cast themselves in the roles of national officials of Aurora who had requested the assistance of the "advisors" and were available to supply them with information and services in connection with their mission in the country. Various faculty members were available at different stages of the project to provide specialized guidance. They were Mrs. Matilda Sugg of the Bureau of Labor Statistics; Joshua Levine, Regional Manpower Consultant of the Agency for International Development; Frederick Harbison, Princeton University; Everett Kassalow, University of Wisconsin; and John Hilliard, Ford Foundation.

For the purpose of the exercise, the 29 participants were divided into four groups. Each group worked on each of the four phases. At stated intervals a group member reported, in a plenary session, on the findings of the group with respect to the particular phase that was being studied. These oral presentations were followed by a discussion. Subsequently, the groups submitted a written report of their conclusions. The final manpower plans presented by each group presumably embodied adjustments and compromises with respect to the ultimate goals set for Aurora. Excerpts of these findings are reproduced in the following pages.

Participants from five countries ask Professor Harbison's opinion on one of Aurora's problems.

B. DESCRIPTION

Aurora displays many of the characteristics of developing countries, having acute social, economic, and institutional problems such as a high population growth rate, considerable illiteracy, low per capita income, a predominately rural economy, and high rates of unemployment and underemployment. It is a coastal country of about 100,000 square kilometers with a subtropical climate. Only about 50 percent of Aurora's land is arable. Although the 1962 population density was only 140 persons per square kilometer, more than 60 percent of the total population lived along the coast where most of the arable land is located. Here density was over 400 people per square kilometer. Population is growing at the rate of three percent per annum, a rate twice that of North America and Western Europe. Of the nation's total population of 14 million people, about 2 million are located in the capital city. Thirty percent of the population is urban. One substantial minority group comprises 10 percent of the total population.

Until the middle of the nineteenth century, Aurora had been part of a large empire dominated by a country with an alien culture. The long period of foreign control tended to erase local culture, making it difficult for Aurora to find its national identity in a modern world. Throughout the nineteenth century, the country was plagued with political instability. Since the 1930's, however, the political scene has been relatively quiet and dominated by four major parties which represent the many shades of national political orientation.

In 1962, the per capita GNP for Aurora was $216. The economic plan initiated in 1964 hopes to increase GNP at the rate of seven percent per year.

The agricultural sector of the economy provides about 50 percent of the national income and accounts for about 85 percent of Aurora's exports. The most important of these are fruits, nuts, and oils. Aurora's economic plan emphasizes decreased dependence on agriculture and increased industrialization. Because of this, national policy has emphasized the import of capital goods. A shortage of foreign exchange has made it necessary to limit consumer goods accordingly.

The census of 1962 shows that 95 percent of the males age 15 and over, and 65 percent of the females in this age group, were economically active. There are indications, however, that labor force figures were inflated by census takers who customarily include housewives and many children on farms in the economically active population. Three-fourths of the labor force was located on farms.

According to available statistics, only 1.9 percent of the labor force was unemployed in 1962. Auroran officials feel that these statistics are not accurate. Rural/urban migration, increased mechanization, and an ever rising number of new entrants in the labor force resulting from high rates of population increase are expected to raise the unemployment rate rapidly. In addition, little is known about underemployment, which is thought to be particularly widespread in rural areas.

Seventy percent of the Auroran population over seven years of age were illiterate in 1962. Literacy was particularly low in rural areas. Only about two percent of the Auroran labor force obtained some secondary schooling, and less than one percent entered a university.

The non-agricultural sector employed 25 percent of the labor force in 1962. As a result, only about 10 percent of the total labor force is organized. However, in some industries this proportion is much higher and in mining rises to about 90 percent.

Although compulsory arbitration is a legal requirement, in practice this has not had the effect of producing peaceful labor-management relations. Three trade union federations, of different political orientations, press their demands with varying degrees of militancy. In all three federations, the national centers often lack control over local trade unions, and many of the work stoppages are due to wild-cat strikes. Aurora's industrial workers have been prone to use the strike to express their dissatisfaction with many years of economic and social deprivation.

Protective legislation is covered by the Labor Code of 1929. Its effectiveness is limited, however, because agriculture is not covered and because the enforcement staff is small. Child labor is still widespread as is a workweek of more than the legal maximum of 40 hours. Social security legislation exists for disability, health, maternity, and old age. Here again coverage is limited to industrial workers.

Aurorans have given considerable thought to economic planning. For this purpose they have established a Central Planning Agency which has the basic responsibility for all planning. However, because of its small staff, the Central Planning Agency has had to delegate much responsibility to other Government agencies, and, in the manpower field, overall planning is done by the Ministry of Labor. A Manpower Planning Advisory Committee has been called into existence. It is composed of representatives of the Labor Ministry, the Ministry of Industry and Commerce, the Ministry of Public Works and Monopolies, the Ministries of Agriculture and Education, universities, private employers, and trade unions. Its main task consists of bringing manpower problems to the attention of the Central Planning Agency.

The efforts of the manpower planners are reflected in the statistical materials which supplement the descriptive information on Aurora.

Table one (1962). A breakdown of the population by age and sex, and by labor force status. The relatively large proportion of children is characteristic of populations with a high growth rate. Many informed persons consider that the unemployment situation in Aurora is much more serious than the small number reported in this table would indicate.

Tables two and three (1962). Educational attainment of the population and the labor force. Most of the population is illiterate. As can be seen from table three, a large majority of the labor force never entered primary school.

Table four (1962). Economically active population by sex. It is evident from table four that agriculture is by far the largest industry, employing about 75 percent of the total labor force. In agriculture the number of female workers is very large, slightly exceeding the number of men. Other industries also employ a significant number of women, but here they are a very small proportion of total employment.

Table five (1962). Description of the population and the economically active population by size of community. It is apparent that labor force participation in smaller communities is considerably higher in all age groups than in the larger ones. For women the most striking fact that emerges from the statistics is that in all age groups they are at least eight times as likely to be in the labor force in small communities than in larger ones.

Table six. Value added to GNP by major industries (1964-1969). This table shows the economic growth which is planned for various industrial sectors during the period of Aurora's first five year plan. The overall growth target of seven percent per year varies considerably from one sector to another.

Tables seven through 12. These tables show the 1962 supply of high-level personnel, the estimated need in 1977, and the supply that will be available in that year. It is evident that the educational system, as presently constituted, does not have the capacity to meet projected development needs. Planners will have to fill the gap with new or expanded programs in the field of education and training if Aurora's development targets are to be realized.

Tables 13 and 14 (1964-1979). These tables deal with providing skilled manpower through vocational training. It is hoped that 100 training centers will be established during the five year economic development plan period. Persons to be trained in these centers will be primarily foremen and workers who are skilled, or who can be promoted to skilled jobs. The training course will run for six months. Aurora recognizes that it will be financially impossible to train all the needed technical workers in training centers. Therefore, large numbers will have to obtain job skills in training courses in industry or on the job.

Table 15. Actual population in 1962 and projected population in 1987. Population projections are based on three alternative assumptions. The first, of continued high fertility, applies if taboos against birth control continue. The second assumption is applicable if public opinion comes to accept birth control, but no birth control

programs are initiated by the Government. Under the third assumption, there is general public acceptance coupled with an active government population control program. With the first assumption, the population will rise from about 14 million in 1962 to about 29,500,000 in 1987. The second assumption would bring population to 27,500,000 in 1987, and the third to 25,600,000. Although Aurora's planners favor a change in the country's population policy, they expect that the population growth rate will remain very high.

Table 16. Labor force participation rates by age and sex (1952-1979). By international standards, Aurora has very high participation rates for very young and very old males as well as females of all ages, but particularly of old women. In general, the high participation rates characteristic of Aurora reflect a low proportion of youths in secondary and higher educational institutions and, more important, the fact that the majority of the labor force is engaged in farming where young and old can help with production. In an industrialized environment a much smaller proportion of such persons would be classified as economically active. It is believed that the participation rates of marginal workers in Aurora will decrease as industrialization proceeds.

Table 17. Projected employment and unemployment by industry (1962-1979). Since it was recognized that the agricultural sector was already grossly overstaffed and was also very poor, it was decided that further increases in the agricultural employment should be prevented, if possible, and none was projected after 1967. On the other hand, planners projected a continuing increase in nonagricultural employment based on an examination of past trends, but primarily on the basis of their plans for future growth. Thus, agricultural employment was projected from 4,869,000 in 1962 to 5,619,000 in 1979. Other employment, on the other hand, was projected from 1,630,000 in 1962 to 3,212,000 in 1979--almost double the 1962 number.

Unemployment in 1962 was estimated to be 1.9 percent of the total labor force but 7.7 percent of the industrial labor force. Official estimates indicate that the number of unemployed would triple by 1969 and be six times more than the 1962 figures by 1979. This growing rate of unemployment would be the result of the increased flow of workers from rural to urban areas, and the fact that employers would be under pressure to reduce overstaffing in order to increase productivity.

The rapidly increasing population, combined with inadequate employment opportunities, has fixed a pattern of chronic underemployment on the country. Most industrial establishments, particularly those operated by the Government, are grossly overstaffed. By far the largest number of underemployed are in agriculture, however. No census or sample study has been made to get an actual number of the underemployed, but the problem is generally recognized as widespread and serious. Foreign advisors have stated that public enterprises have been known to hire 10 times the staff needed, and Auroran officials roughly estimate that even at the peak season, 10 percent of the agricultural labor force is not fully employed.

Tables 18 and 19 present a picture of Aurora's expenditures and revenues for the year 1962. Education (17 percent) and services for agriculture (14.5 percent) were the largest budgetary expenditures. Along with transportation and defense, they represented 55 percent of the national budget. Revenues came predominately from direct and indirect taxes (35 percent each).

Table 20. Average daily earnings by industry (1962). For all industries, daily earnings averaged $1.56. They were highest in the petroleum and coal products industries ($2.70 per day), as well as in some services such as real estate and insurance ($2.89 and $2.43 respectively). Mining wages, on the other hand, generally averaged considerably below the $1.56 for all industries.

Table 21. Average yearly percentage changes in productivity, by industry (1959-1964) and (1964-1969). Aurorans are aiming for an increase in productivity in all industries. It is hoped that agricultural production will make the greatest headway along these lines (4.7 percent between 1964 and 1969), followed by manufacturing (4.3 percent between 1964 and 1969). For the remainder of the industries, increases from 1.9 percent (construction) to 3 percent (mining) are projected.

C. PARTICIPANTS' CONCLUSIONS

Seminar participants reported their findings in four phases, but due to space limitations only excerpts from the final plans they evolved will be reported here.

FINAL MANPOWER PLAN FOR AURORA

Spanish Group I

The Group consisted of the following Seminar participants:

Maria do Socorro B. Kelly
Pedro Lizana (group rapporteur)
Silvio Llanos de la Hoz
Hector David Torres (group rapporteur)
Romeo Manuel Hernandez Cardona
Juan de la Torre Ugarte Delgado
Arnaldo Andrés Silvero Maldonado

GOALS

In outlining its objectives for Aurora, this group decided not to make a sharp distinction between short- and long-range goals. The participants reasoned that the general outline for long-range planning ought to include the resolution of the most urgent, current problems. They also felt that all planning should be done with the intention of carrying through proposed projects, regardless of political changes which may occur during the plan period. As its most important goal, the group listed an increase in the purchasing power of the population so that internal, national markets for goods and services would be expanded. Thus, major emphasis would be placed on a policy of full employment, which, it is hoped, would have a multiplier effect in terms of increasing production.

Politically, it was considered most important to educate the entire population for effective participation in the political life of the country. The group also considered the development of labor and business leaders of vital importance. By providing both groups with a better knowledge of each other's problems as well as national economic facts, it was hoped that labor-management relations would be carried on under conditions which would enhance economic development rather than hinder it.

Closely tied in with economic and political objectives were certain social objectives formulated by the group. Thus, they proposed to provide services such as health programs, housing, improved safety conditions on the job, and workers education programs. It was hoped that these would make it possible for workers to perform at optimum capacity.

STRATEGY

Maximizing Employment

This group of "advisors" adopted a population projection which assumed continued high fertility. As a result, the economically active population will grow faster than the anticipated increase in the number of jobs. In order to maximize employment under these circumstances, the group proposed a nine-point program which would favor:
1) Concentrating on a type of industrial production which could use agricultural products obtained through labor intensive processes, 2) modernizing agriculture but without excessive mechanization, 3) cooperatives for agricultural production and distribution,
4) irrigation projects, swamp drainage, etc., which would promote wider utilization of surplus manpower in the rural areas and at the same time would enlarge the quantity of arable land, 5) improving the channels of distribution for the internal market and actively seeking external markets for products derived from the agricultural sector, 6) providing new centers for development and adopting a policy which would redistribute the population to these centers, 7) encouraging factory production at full capacity,
8) strengthening the national employment service, 9) adopting necessary procedures to improve labor-management relations and reduce conflicts which are detrimental to the economy.

Improving the Educational System

The group considered that the structure of Aurora's educational system reflects all of the typical disadvantages of developing countries. The system is the result of improvising and of transplanting foreign systems without making the necessary adaptations to the new country. Aurora does not give evidence of a well thought out educational policy, and there is no program which motivates the population to be concerned about Aurora's economic and social development.

Defects in Aurora's educational system start at the pre-school level as is evidenced by the complete absence of kindergarten. At the primary level, present capacity does not match the needs of the population. Data for 1962 indicates that about 330,000 children of primary school age could not be educated because of a lack of facilities. Even if the present teacher-student ratio of 1:44 is not improved, it will be necessary to construct 7,570 new classrooms, just to absorb the present deficit. Implied in this policy would be the need for an equivalent number of teachers. Curricula is also inadequate, and teachers are using out-dated methods.

With respect to secondary education, the group criticized its uncoordinated and disorganized modus operandi. There is little communication between the various types of specialized education imparted through this system. The teacher-student ratio of 1:63 could also be improved if there were less waste, and more coordination among programs. Like the primary schools, the institutions available for secondary education are incapable of absorbing all of the population of secondary school age. Data for 1962 indicate that nearly a half million children of secondary school age, who were not employed, were unable to attend school because of a lack of facilities. The fact that schools are heavily concentrated in the principal cities also limits the educational opportunities for the majority of the population. Like the primary schools, secondary schools are out of touch with the demands of the labor market. Higher education also shows signs of waste, poor planning, and a lack of response to the labor force needs of the country.

Our proposed revision of Aurora's educational system provides for four main categories: 1) Kindergarten. It is hoped that such early training would integrate the child into society and provide a new system of values for many. 2) Primary education. A number of steps will be necessary to improve the present system. One of these will involve constructing and equipping new classrooms, and another, the development of new teachers. It is proposed that, for the time being, persons with less than the customary teacher training would be used to fill existing shortages. Such people could be taught in accelerated courses which would particularly emphasize literacy training. There will be many youngsters who will not be enrolled in primary school at the customary age. For these a special program emphasizing literacy and certain basic educational requirements should be established, possibly in conjunction with on-the-job training. 3) Secondary education. Here, we would recommend considerable consolidation of existing programs. A two-pronged system is envisioned which would provide certain basic education in addition to specialized education to prepare individuals for their chosen fields of work. Education would be aimed at those who plan to continue in the formal system as well as those who will enter the labor force after completing secondary school. 4) Higher education. It should be the primary goal of university education to prepare the necessary number of human resources required for the rapid development of the country. In order to accomplish this, a considerable reorganization of university curricula will have to take place. In addition, research should be encouraged.

IMPLEMENTING THE PLAN

There should be a Central Planning Organization reporting directly to the President of the Republic of Aurora. It should serve in an advisory and coordinating capacity for all development plans. Planning should be based on economic and social objectives established by the cabinet. In setting up these objectives, special emphasis should be given to human resources planning. The Central Planning Organization should be composed of groups specializing in different economic sectors.

Regional planning offices should be established and operate under the jurisdiction of the CPO. These will advise local governments and thus help to implement national plans at the local level. For this purpose, the country should be divided into sections based on particular economic and social characteristics. There should be a close relationship between economic and social planning at the national as well as regional and local levels.

It is recommended that Aurora's development plan be revised on the basis of a general inventory of the natural and human resources in the country. Such an inventory should take into account all foreign aid and technical assistance. At the same time, the national statistical service should be reoriented so that statistical series reflect the needs of the development plan and can serve as an aid to its execution. In implementing the plan, we consider it of the utmost importance that there be systematic analysis and evaluation of the effectiveness of the plan and of the extent to which goals are met at various steps along the way. It is also a task of the national policy makers to obtain private commitment to economic and human resources development, on the part of organizations and the general public.

We recommend that in implementing the plan, priority be given to certain strategic regions (poles for development) in which the return on investment would be proportionately greatest from the social point of view. The following criteria could be used to determine the location of these "poles of development": 1) population density, 2) natural resources, 3) types of economic activities, 4) political pressures.

FINANCING THE PLAN

In Aurora, one half of the GNP of the industrial sector derives from public enterprise. It is hoped that public funds can be increased along with an increase in the level of savings and of foreign aid. We suggest that some of the public enterprises be reorganized into enterprises of mixed ownership, in order that private initiative and capital are available for them.

FINAL MANPOWER PLAN FOR AURORA

English Group I

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GENERAL STRATEGY

In our opinion, Aurora should adopt both long-range planning and more immediate operational plans. We wish to point out, however, that from time to time there must be a re-evaluation of the priorities attached to various objectives of the long-range plans. The nation may alter its preferences, and social changes, brought about over time, may also necessitate adjustments. Even when the long-range objectives remain unchanged, it might become necessary to revise some of the basic assumptions of the long-range model, as existing conditions change rapidly and more experience is accumulated in the process of economic growth. Thus a revised long-range plan should be presented with each five year plan.

Conflicts of objectives are inevitable in any plan which includes the entire gamut of the social and economic life of a country. Their reconciliation is always a difficult and delicate task since the objectives, of which only some can be defined in quantitative terms, are not necessarily compatible. The objectives of the manpower plan must consider the objectives and the strategy of the general economic plan. The economic plan in a sense must become the guide for manpower planning.

During the Operational Plan, 1964-69, Aurora must be prepared to put up with some unemployment, but the ugly upward tendency of the unemployment rate should be arrested. The way to do this is to put as many resources as possible into rural development projects. Certainly such allocation in favor of rural development conflicts with the objective of achieving greater income growth. But if the private sector is simultaneously stimulated with adequate monetary and fiscal policies, the rate of income growth is not likely to be endangered. The private sector should be given greater opportunity to participate in industrial activity while the government should concentrate on building the infrastructure.

The government should not overplay its role of controlling imports. This might lead to corruption and high prices. But the balance of payments should be kept under constant review to see that the importation of luxury items is kept to a minimum. If imports are permitted whenever possible, while at the same time efforts are directed to providing more food from the soil, the problem of rising prices will be minimized.

Thus our general strategy is:

1) Increased investment in the rural economy.

2) A partially open economy in which only import items unfavorable to development are restricted.

3) Encouragement to private firms to set up enterprises in partnership with the government.

The above should help to strike a balance between employment, prices, and income growth problems.

PROPOSED NEW LONG-RANGE PLAN

We wish to recommend that at the end of Aurora's current plan, the nation evolve a new one covering a period of 20 years. The long-range plan should have the following goals:

a) A reduction of the population growth rate to two percent per year.

b) Full employment.

c) Universal primary education for all children between the ages of six and 12.

d) A narrowing of the income differential between rural and urban areas.

e) The doubling of per capita income to $432 a year.

a) Population Policy--A broadly based and vigorous program of family planning should be pursued so that the present disastrous population growth rate of three percent per year can be progressively reduced and brought down to two percent by the end of the plan period.

b) Employment and Unemployment--During the plan period, policy should be directed towards curbing underemployment which is currently on the increase. There is no doubt that full employment will be one of the most difficult goals to attain. The problems involved are formidable. Nevertheless, precisely because it is such a major problem involving so many people, a policy of full employment should be given priority during the plan period.

The full-employment policy calls for a careful analysis of the potential of each sector for absorbing more workers. The general economic development program must, therefore, be geared to the employment target by making the employment effect of each economic project a factor in judging its acceptability. It must also serve as a criterion for evaluating the comparative advantages of different techniques of production. In addition, employment policy should be closely linked to education policies. The pattern of industrialization that will occur during the 20 year plan period will require increasing output of skilled workers, technicians, and high-level specialists. Agricultural development will also require better trained and more technologically oriented rural workers.

The biggest constraint imposed on planning for full employment is set by the availability of resources. An important element of the employment strategy to be adopted by Aurora during the plan should be to distribute the labor force over those sectors in which the cost of employment is small, such as in public works programs and small-scale industries.

c) Education Policy--The educational target of the plan reflects the view that increased education is of general benefit to the entire society, and that it increases the productive capacity of the population as well. One of the main bottlenecks that we can foresee is the availability of training facilities for teachers. Not only must the number of facilities and teachers be increased, but the teacher-student ratio must also be reduced.

d) Income Distribution--A major objective during the plan period should be to reduce the income disparity between the rural and urban areas. This requires that a policy of integrated rural development be vigorously pursued.

e) Increase in Per Capita Income--It is hoped that the effect of the above measures will be a substantial increase in the per capita income.

PROPOSED SHORT-RANGE PLAN

A five year short-term operational plan should be worked into the framework of the 20 year plan discussed above. It should recognize unemployment as the fundamental issue in Aurora. Unemployment is made acute by the movement of people from rural to urban areas. Therefore, planning strategy should emphasize rural development in an effort to keep people from migrating.

Objectives of the Five Year Operational Plan:

1) Integrated development of the rural areas.

2) Initiation of family planning programs.

3) The acceleration of changes in agricultural methods.

4) The development of basic industries for the manufacture of producer goods so

that the needs of further industrialization can be met mainly from the country's own capacity.

5) Arresting the menacing growth of unemployment.

6) Attainment of a national growth rate of five percent to five and one-half percent with a view to assuring self-sustained growth in the shortest possible time.

FINAL MANPOWER PLAN FOR AURORA

Spanish Group II

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GENERAL CONSIDERATIONS

1) The adequate exploitation of natural resources should be the first step for any development strategy. Since Aurora has not done this, it is likely that its manpower profile will assume different dimensions as the location and extent of additional resources is revealed.

2) It is important that manpower planning be well integrated with total economic planning. The social and economic aspects play an important role in a country which is approaching modern economic development and at the same time is seeking its identity as a nation.

3) It would be to Aurora's advantage if the government took charge of a large portion of the nation's strategic industries. This would be particularly essential for long-range planning.

RECOMMENDATIONS

General

1) Promote agrarian policies which will raise the standard of living of the farmer and increase agricultural production for the country.

2) Establish exchange controls which will permit the importing of goods necessary for economic development, especially for the development of basic industries.

3) Provide protection for industry.

Social

1) Integrate the most important minority group in the economic life of the country.

2) Provide minimum public services such as electricity, sewers, and health facilities to all areas of the country.

3) Promote cooperatives in rural as well as urban areas.

4) Strengthen the Auroran employment service. It will be a decisive step in assuring the proper functioning of the labor market. The employment service must coordinate its activities with those of the regional planning offices in order to influence labor mobility and migrations.

5) Extend the benefits of existing labor legislation to agricultural workers, since these constitute 75 percent of the country's work force but have no protection.

Economic

1) Take an inventory of existing natural resources so that these might be exploited in the best possible manner.

2) Diversify agricultural production and create an organization which would seek foreign markets for agricultural products.

3) Promote industrial growth and emphasize the full use of present industrial capacity.

4) Improve the transportation network, communication, irrigation and drainage; and invest in the production of energy.

5) Adopt an accelerated program of construction of housing, hospitals, aqueducts, schools, and sewers in order to provide employment as well as a better standard of living to the population.

6) Establish a minimum wage as the first step toward insuring a basic subsistence level for the employed.

7) Use wage policies to aid in the qualitative and quantitative distribution of human resources.

Administration

It is considered necessary to achieve rationalization of the services of the public sector. In order to do so, it would be wise to reform the administrative structure. It is felt that functions should be redistributed to avoid duplication of efforts, and that more training should be provided for government personnel by means of short-term seminars or long-range training programs at the university level. It is paradoxical, but clearly evident, that in Aurora, human resources planning does not take place in a central office but in various places in the Government with a resulting conflict in programs and goals.

HUMAN RESOURCES DEVELOPMENT

With financial assistance from the national Government, the present educational system should be encouraged to make greater use of technical equipment, to institute accelerated programs to develop instructors, and to establish channels which would result in closer coordination between formal education and on-the-job training. In the short run, the Government should also make greater use of educational radio programs and expand its literacy training throughout the country. Literacy programs might provide many people with the opportunity to take apprenticeship and on-the-job training which would not be available to them without a reading skill.

The above programs should be complemented by simultaneous efforts to train middle- and high-level manpower. Such programs are, of necessity, long-range and may require a reorientation of the existing training institutions.

Programs for the training of labor leaders are also encouraged. These should try to awaken them to their roles in the development process of their country.

FINAL MANPOWER PLAN FOR AURORA

English Group II

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The group considers that short-range planning for Aurora will have many serious difficulties, and though it should be undertaken, it appears that long-range planning will prove more realistic--the target being 10 or 15 years. The important problem is to determine what should be the social and economic goals of Aurora over this period. We would put forward the following as constituting the social and economic goals which Aurora should achieve.

A) SOCIAL GOALS

1) Democratic Planning. Planning should be democratic and take place in a democratic political system.

2) Social Justice. An attempt should be made to attain social justice by measures such as incomes policies, tax policies, collective bargaining, social security, etc.

3) Full employment is a most important social goal for the country, but it is unrealistic to hope for its achievement within the planned period. Aurora's planners should recognize, however, that this is the greatest social goal that they need to fight for.

4) Balanced Development. It is important and necessary to consider balanced development throughout the entire country, giving special attention to backward areas and minorities.

5) Education for All. Efforts should be made to realize the goal of compulsory primary education and increasing the general level of education including vocational and technical training.

6) Improved Labor-Management Relations. The planners should aim to create harmonious labor-management relations through collective bargaining, reducing labor conflict and improving working condtions.

B) ECONOMIC GOALS

1) It would be very difficult for Aurora to increase the economic growth rate of seven percent; it is necessary, however, for this growth rate to be achieved and maintained, if development should proceed as planned.

2) The economic development plan should operate in a mixed economy.

3) During the planning period, efforts should be made to achieve economic development without inflation. The latter is regarded as one of the most dangerous economic threats, considering the trade union demands for higher wages and lack of competition on the domestic market.

4) Balance of Payments. This is a rather difficult goal to achieve, because economic development will increase domestic demand for foreign goods--both for consumer and capital goods.

C) RECOMMENDED REFORMS

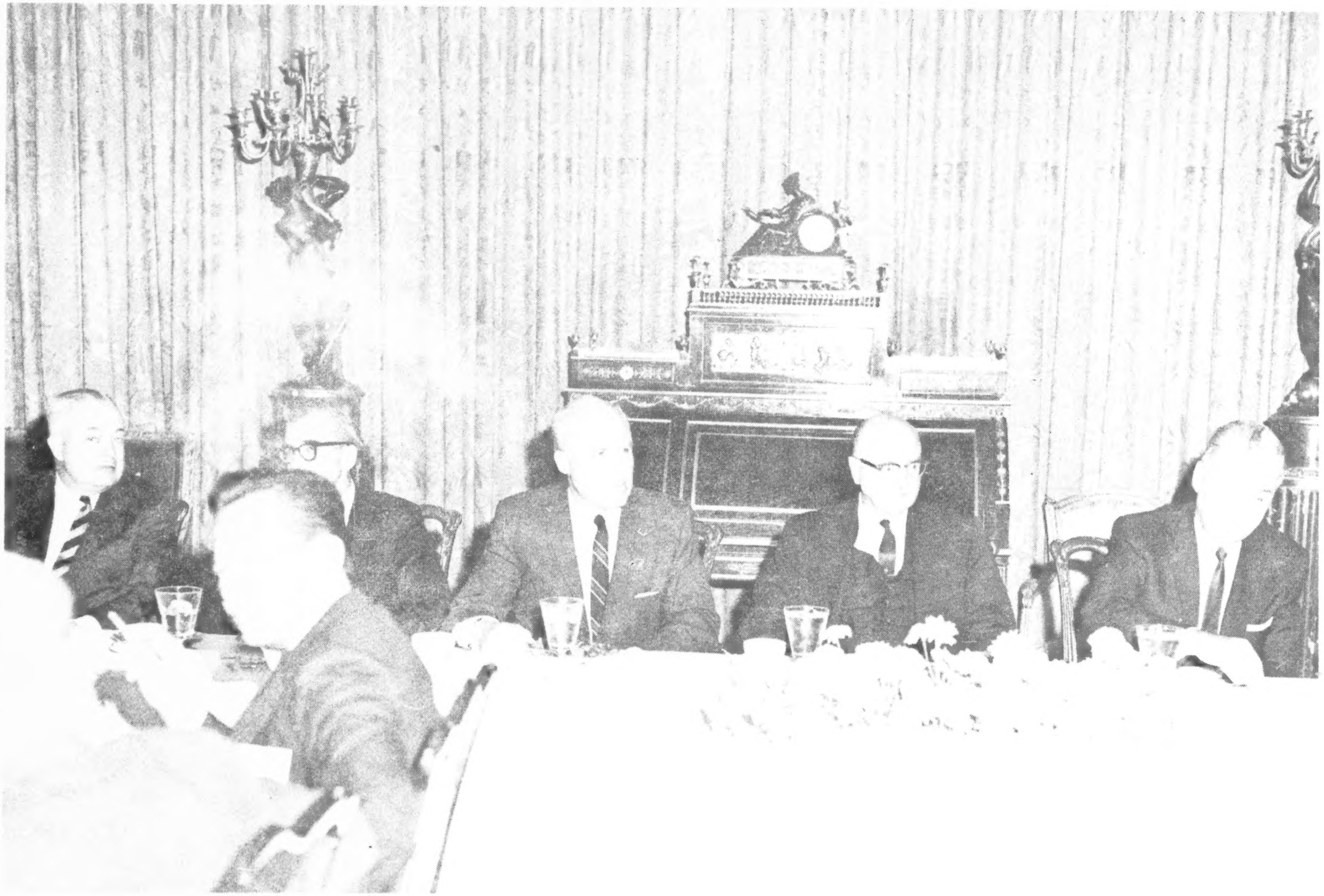
To achieve these economic and social goals it appears necessary to have four main types of reforms:

1) A reorganization and revitalization of the civil service.

2) The introduction of agrarian reform.

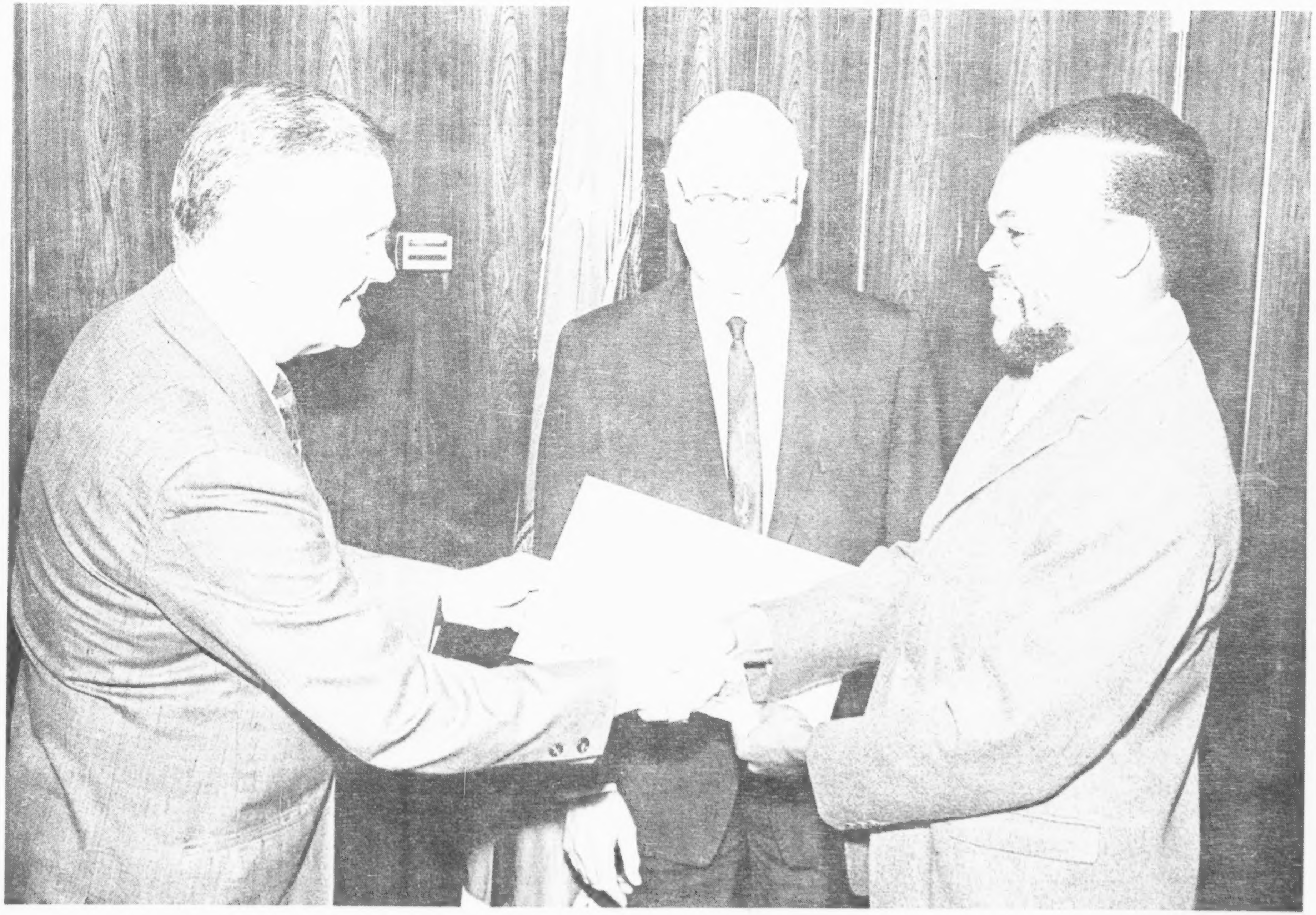
3) Tax reform.

4) A review of the national laws to bring them into harmony with the new social and economic aspirations.



On December 6, 1966, the Agency for International Development presented certificates to IMI Seminar participants at a formal luncheon ceremony at the Department of State.

Mr. Torres of Guatemala speaks for the group at the Department of Labor closing ceremonies.



At a subsequent closing ceremony at the Department of Labor, Assistant Secretary Leo Werts presents a certificate to Mr. Mfundo of Tanzania.

Seminar participants and IMI staff at the close of the Seventh International Manpower Seminar.